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Information Wanted.

The MANUFACTURERS' RECORD wants information about Southern industrial and business matters. It invites correspondence from every one who has anything of public interest, whether it be in the shape of discussion of business matters that concern the South's prosperity, the building of a new factory of any kind, the enlargement of an old one, the opening of a mine, the projection or the construction of a railroad, or whatever it may be that relates to Southern advancement. The MANUFACTURERS' RECORD aims to be the medium of communication between the business interests of the South—a medium through which manufacturers and others can express their views and give any facts relating to their own business or to the business of the country, as well as to be the medium through which the business interests of the South shall be made known to the people of the whole country. Every manufacturer in the South must at times have information that would be of interest and value to others, the publication of which would help the South. The MANUFACTURERS' RECORD invites all such correspondence.

The Proposed Baltimore Exposition.

In a letter to the editor of the MANUFACTURERS' RECORD Mr. F. J. Kimball, president of the Norfolk & Western Railroad Co., referring to the proposed Southern exposition in Baltimore in 1897, says:

In my opinion the suggestion is valuable and feasible, and should be carried out, in which event I have no doubt the people of Virginia and West Virginia will heartily co-operate, and will do their share in making the exposition a success.

Mr. Decatur Axtell, vice-president of the Chesapeake & Ohio Railway Co., writes:

I should think every business man in the South would feel an interest in the proposed exposition at Baltimore in 1897. Baltimore possesses many advantages that no other city has, and the occasion of the centennial makes it a special opportunity.

I am sure you will have the sympathy and help of every business interest in the Southern States.

The Business Union of the West and the South.

Measured by the effect which it is destined to have upon the future of America, the most wide-reaching movement that is now before this country, if not the most important that has been before the public for the last twenty years, is the southward trend of all business interests from the West.

The convention in Wichita last week, in which the desirability of a closer commercial connection between the South and West was clearly pointed out, was but the expression of a sentiment which has been steadily growing in favor throughout the West for the last few years. The grain producers and general shippers of that section are beginning to realize that south Atlantic and gulf ports furnish the natural outlet to foreign markets for all their products. The decreasing profits of late years have called attention to the fact that shipping grain and provisions by long rail haul to New York and other Northern ports and thence to Europe is simply adding to the cost and reducing the profits of the producers. South Atlantic and gulf ports furnish the natural connection between Europe and the West. The rapid increase in their commerce, as recently pointed out in the MANUFACTURERS' RECORD, shows how this fact is already being appreciated. It is not an imaginary union, based on theoretical, financial or other dogmas, but simply a business connection by which the West, heretofore bound to Northern ports, is breaking away and seeking to do a direct business with Europe and South America through the most direct channels. At the close of the convention among the resolutions adopted was one in which it was said:

Owing to the geographical position of the gulf and south Atlantic ports in connection with so large an area of the producing section of the West, where the export surplus of the Union is produced, it is the voice of this convention that the gulf and south Atlantic ports generally are the natural outlets for the Western and Southern products for exporting purposes, and also the natural inlets for the importations required by their populations.

The different commercial bodies represented at this convention were urged to lend every aid and support in their power to shake off the present thralldom of paying tribute to Eastern and north Atlantic States. "Providence," said this resolution, "has so blessed the people of the Western and Southern States in their immense productive resources, and the gulf and south Atlantic ports in their natural geographical position, as to indicate that the hand of our Almighty Creator designed them as commercial seaports to be utilized by the ever-advancing and enterprising Western and Southern merchant, farmer and planter."

The Resources of West Virginia.

The recent address of ex-Governor Fleming upon the resources of West Virginia, delivered before the Chamber of Commerce of Pittsburg, which has just appeared in pamphlet form, is one of the best presentations of the advantages of that favored section that has ever been put forth. After touching upon the educational interests and the railroad development, Governor Fleming devotes his attention to the mineral and timber wealth of the State and to the progress already made in their utilization. "There are," said he, "more than 7,000,000 acres of forest lands in West Virginia, 16,000 square miles of coal, vast quantities of iron ore, pools of petroleum and natural gas apparently unlimited, glass sands, limestone, potters' and fire clay." The forests cover nearly one-half of the State and embrace a great variety of both hard and soft woods. "More than one-third of all the poplar in the United States" is said by Mr. Fleming "to be found in West Virginia." "The activity," said he, "that is displayed in opening up and developing the timber regions can scarcely be understood by those familiar with the old-time, primitive lumbering methods in vogue in the earliest days of the State. Huge saw mills with all modern appliances for cutting and handling timber are located in nearly all different sections of the country. One great mill that cost \$100,000 to build has a capacity for cutting over 30,000,000 feet of lumber a year, and yet the magnitude of the timber wealth of the State may be judged from the fact that, notwithstanding this enormous capacity, this particular mill has timber sufficient and easily accessible to it to supply it for thirty years. There are other mills equally as large and one even larger that are turning the forests of the State into merchantable lumber."

Recent developments have proved that there are immense oil deposits in various parts of West Virginia, and it is now the third oil-producing State in the Union, and bids fair, according to Governor Fleming, to become the first. An idea of the rapid growth of the business may be gained from the fact that in 1892 the total output of oil in West Virginia was 3,757,000 barrels, while in 1893 the output had swelled to 8,387,985 barrels. The average daily production during January, 1894, was 27,000 barrels, and the prospects now indicate that the oil production of West Virginia for 1894 will be worth \$8,000,000, against \$5,500,000 in 1893 and \$2,100,000 in 1892. The number of producing wells has increased from 768 to about 2000 at present, with an aggregate investment, including pipe lines, of over \$13,000,000. The chief oil-pro-

ducing company of the State is now paying out monthly for labor, material, construction and rentals over \$250,000, or \$3,000,000 a year.

In 1880 West Virginia had an output of 1,400,000 tons of coal, while in 1890 this had increased to 6,000,000 tons, and in 1893 the production approximated 11,000,000 tons, almost doubling within three years. Notwithstanding the fact that the mining of coal and the manufacture of coke are industries of such recent development, West Virginia now stands fourth in the production of coal and second in that of coke. "With the opening of new railroad lines," said Mr. Fleming, "and the extension of present shipping facilities, these figures will be largely increased within the next decade, as the present development merely skirts the vast area of workable coal that will soon be accessible for cheap and easy operation. A few years ago the region now penetrated by the Norfolk & Western Railroad was one of the wildest, most thinly settled and undesirable portions of the State. It was a country where only the daring hunter would choose to camp; rough, precipitous mountains and scraggy timber marked a wilderness where wild animals were secure in their hidden retreats. Lands now yielding \$500 per acre could have been had for the nominal taxes charged against them. The Norfolk & Western was built along its ravines, and the busy hum of industry is now heard in every valley. Collieries are in operation in almost every direction, and at night the heavens are ablaze with the fires of coke ovens, and thousands of cars come and go daily bearing to distant markets the products of the mines of this wonderful region, and a population of thousands of working people have homes nestled among the hills and valleys of this once-neglected section." What has been accomplished along the line of the Norfolk & Western is but an illustration of what has been done along the lines of the Chesapeake & Ohio, the West Virginia & Pittsburg, the West Virginia Central and other roads, and it is but an indication of what will be accomplished along many lines of roads which will be built during the next few years.

There is good ground for the enthusiasm which always inspires Governor Fleming when he speaks or writes of his State. It is a State of such marvelous resources, of such boundless possibilities; a State where wealth is being and must be created so rapidly for generations to come, that the mind is dazed as we attempt to forecast the future. When it is remembered that this comparatively small State, producing 10,000,000 tons of coal a year, has 50 per cent. more coal area than all of Great Britain, whose output of coal is now about 200,000,000 tons a year, we can begin to form some conception of the

future extent of its mining industry. Added to its boundless resources of coal and petroleum are its vast forests of virgin timber, its liberal supply of iron ore, and of almost as great importance, its remarkably favorable position in the heart of the industrial section of the United States, guaranteeing the free investment of the vast capital that has enriched Pennsylvania and adjacent States. West Virginia only needs to make its resources and attractions thoroughly known to the world to bring about an era of development that will probably for substantial progress surpass anything that any State in this Union has yet witnessed.

"Talk Up Your Town."

The editorial in a recent issue of the MANUFACTURERS' RECORD under the above heading has attracted considerable attention in the South, and the Norfolk Landmark in republishing it heartily commends it to the attention of all Southern people. Using Atlanta as an illustration, as has often been done by the MANUFACTURERS' RECORD, it points out the fact that the people of Atlanta never miss an opportunity to attract attention to their town. Whether for good or evil, whatever occurs in Atlanta is always the biggest of its kind. The Landmark in commenting on this says:

Everybody you see from Atlanta is a lunatic about the town. Nothing can be mentioned that has not its perfect development in Atlanta. Atlanta is the prettiest city in the world. No use to mention Edinburgh or Washington; they are not "in it," as the Atlanta man says, with his town. The fellow will actually brag on the number of people that are killed by the trolley system, or will declare that nobody ever was killed by it in Atlanta—whichever view happens to be first. The biggest storms, with the least damage, occur there; the most sensational defalcations—no matter what it is, it all counts, in the mind of the truly loyal Atlantian for the glory of the place. The very sparrows of Atlanta are esteemed better than those in any other town.

Whatever may be thought of Atlanta's ways and Atlanta's methods of securing notoriety, even if by means of all the evil that happens, as well as by all the good things, the results are seen in the building of a city that more thoroughly typifies Chicago in its push and energy and vim than any other place in the South. The same spirit that has made Atlanta a great railroad and manufacturing centre, that has built up its mercantile business, that has made it as widely known as other cities of five times its population, that has helped to make it one of the most beautiful residence cities in the South—this same spirit if more general throughout the South would accomplish for that whole section just what it has accomplished for the city of Atlanta.

A Broad View of Things.

It is a gratifying exhibit that Newport News makes of its export business during the month of March. From the report it is shown that the value was \$1,271,219, against \$628,741 during the same month last year. During the first three months of the present year the exports of that port amounted to \$4,378,266, against \$2,010,226 for same period in 1893, an increase of 117 per cent. The corn exported in March reached about 1,000,000 bushels, a gain of 810,934 bushels over the same month in 1893. This is an evidence of the growing importance of this young Virginia seaport, and is but another evidence of the great future in store for Hampton Roads and its great harbors of Norfolk and Portsmouth and Newport News.—Norfolk Virginian.

There is a generous tone to the above comment which is very praiseworthy. Too much tendency exists these days to

depreciate and criticise a rival city. Such criticism never helps the town where it originates or the paper which publishes it. The Virginian takes a liberal view of Newport News and its prosperity, recognizing the fact so long emphasized by the MANUFACTURERS' RECORD that what directly benefits one city is a benefit to the other. Norfolk, Newport News and Portsmouth, though separate corporations, are all parts of a great commercial community having many interests in common.

Stop Croaking.

The MANUFACTURERS' RECORD does not pretend to claim that times are prosperous and business active, but it does insist that there is entirely too much croaking about the conditions of business. Even men whose trade is fairly active, and who are making money, seem to be touched by the contagion of the croaker and are constantly claiming that business is poor and the outlook gloomy, when there is no foundation in their case, at least, for such statements. An illustration of this was seen a few days ago, when a Louisville manufacturer, in discussing business matters, claimed that the country was going to the dogs; that there was nothing doing in trade, and no prospects for any improvement. He was a pessimist of the pessimists, but in the course of an hour's conversation he incidentally stated that he had done more business during the month of March than for the three preceding months. When asked how this harmonized with his despondent talk, he excused the latter by saying: "The increase in my business simply applies to last month, and I do not know what it will be for the rest of the year." His trade has developed, and his sales for the month exceeded those of the three preceding months, and yet he was so accustomed to his croaking that he croaked day in and day out, and gave himself and everybody else that came in contact with him "the blues." This man is but a sample of a large part of the business community of the country. Business may not be as good as one might desire, but croaking never helps it, and the croaker only depresses himself and depresses all with whom he comes in contact, and the result is that business becomes what he claims it is. It is the man of enthusiasm, of vim, who looks on the bright side—the man who realizes that this is too big a country to be ruined even by a panic and by bad legislation—it is this man who accomplishes something. "Stop croaking" and business will soon prove the wisdom of it.

On May 1 Front Royal and Riverton, Va., will celebrate the completion of two handsome iron bridges that have been built across the Shenandoah river to connect these two towns. Despite the dullness and depression in many places, Front Royal and Riverton have grown steadily, and the coming celebration will doubtless prove of great material benefit by attracting thousands of visitors, who will see for themselves how these towns are progressing. Hon. John W. Daniel will deliver the principal address, while Governor O'Ferrall and other distinguished people are expected to be present.

EDWARD ATKINSON ON BANKING.

A Review of the Currency Question—The Repeal of the Tax on State Banks Advocated.

BOSTON, April 16.

Editor Manufacturers' Record:

By letter of April 12 you refer to a republication of a letter of mine dated October 7, 1892, lately reprinted in the Atlanta Journal, favoring the repeal of the tax on State bank notes. You ask me whether or not, after a further study of the question on later information, I have changed my opinion on this subject. As this is a very important matter at the present time, I will venture to review the case at some length.

The tax on the circulation of State banks was a necessary part of the national bank act, the main object of which was to make a forced loan of that part of the banking capital on which the circulation of notes had been, or might have been, based, in order to apply the avails of such loan to the conduct of the civil war. Its effect was to induce and almost to compel the then existing banks to lend their capital to the government on interest. The grant of the power to issue circulating notes secured by the deposit of the bonds issued in testimony of the loan was an incident; it was not the main object of the national bank act.

The act served its main purpose well, and it also gave to the country a secured bank note circulation of limited amount which cannot be adjusted to the varying conditions of trade and commerce. The margin of profit on the circulation is now so very small as not to warrant any considerable extension of the national bank note circulation. Moreover, whatever effort may have been made to diminish the revenue of the United States in order to keep up certain taxes, thereby stopping, for the time being, the payment of the bonded debt, that effort has over-shot the mark.

It is very evident to any student of the finances of this country that within a short period of time a surplus revenue will again accumulate in the treasury, which will be applied to the liquidation of the bonded debt, and it is probable that within a single generation of thirty-five years from the end of the civil war, in the conduct of which the debt of the United States was incurred, the bonded debt will have been wholly paid (see note) at no very distant date. There will be no United States bonds available to secure national bank note circulation.

The grave danger of converting the treasury of the United States into a bank of issue becomes more and more apparent. The community, feeling a need for instruments of exchange, and being forbidden by a tax on bank circulation to supply its own needs, turns to the government and calls upon the government to do that which it is unfit to do, namely, to supply a circulating medium in the form of notes. Out of these conditions came the dangerous cry for the issue of more greenbacks, which was stamped out by the veto of President Grant in the inflation bill of 1874. Then came the yet more dangerous cry for the government to buy silver bullion or to coin it freely of full legal tender for anyone who might bring it to be coined.

Now the mischief and fraud of these proposals consists in the legal tender provision. Good money, that is to say, coin which is worth as much after it is melted as it purports to be worth in the coin, needs no act of legal tender to force its acceptance. It is only bad money that must be forced upon a creditor by an act of legal tender. The creditor may submit to force once, but not twice. What a fool he would be to give credit on bad money. Bad money is money that is worth less after it is melted than it purports to be worth in the coin—silver dollars, for instance, which are worth less than fifty

cents when melted, or the counterfeit dollars of full weight that are now said to be coming into circulation.

Any man of common sense can see this. Suppose the coinage were free and that there was no legal tender. Suppose the coins of gold were named "dollars" and the present silver dollars were named "buzzards." Anyone could then take gold bullion or silver bullion to the mint and have it coined. Would anyone want any "buzzards"? Would anyone grant a credit payable in "buzzards"? Would anyone get up a bank on a "buzzard"-basis? These very questions show the folly and the fraud of the whole effort to debase the dollar for the benefit of the silver miners, who seem to turn out as much silver at fifty cents as they did when the silver in a dollar was worth a dollar.

Of course I do not mean to say that the silver craze is all fraud, or that the supporters of free coinage of full legal tender silver dollars are all knaves. But the more honest and sincere they are the more mischief they may do. It is an old aphorism that "hell is paved with good intentions," of which aphorism some of them will show themselves up as good examples when their eyes are opened.

I know from my own experience how a man may get mad with himself down to the bottom of his boot soles when he finds out how little he knew about these matters when he thought he knew the whole. There are a number of men who call themselves statesmen, who think that because the constitution of the United States gave authority to Congress to coin money and to establish the value thereof, therefore the Congress of the United States can by its fiat or decree make men value a cheap dollar, a 50-cent dollar or a buzzard dollar as much as they value a dollar made of gold. The framers of the constitution knew better. They had had their bitter experience with fiat money. What they meant was that the Congress of the United States might establish the valuation of foreign coins according to their weight of metal, and the valuation of the domestic according to their weight of metal. That is all they ever have done, and all they can do.

In the international commerce of the world, which has never been subject to the evil effect of an act of legal tender, every coin, whether made of gold or of silver, is rated in exchange according to the weight of pure gold or pure silver in each, and no man can put it off on his neighbor for any more.

Legal-tender acts were born in fraud before the Christian era. The Roman senate debased the Roman coins by taking out a part of the weight in the second Punic war. Charlemagne established the silver pound, and divided it into 240 pieces. Some of his successors in France debased the coin, and it has been debased from time to time until within recent years. The coin of England was debased in the time of Edward III, in the time of Henry VIII and in the time of Queen Elizabeth. Every one of these acts was accompanied by a decree of legal tender. It was made a penal offence for a man to refuse to take the debased coin.

The effort has recently been made to cheat the people of the United States in the same way. The people, especially the farmers, are rather slow, but very sure, and they have come to the conclusion not to be cheated that way. President Cleveland guides them and sustains them in their true purpose, as they will sustain him and his supporters in his acts. I pity the members of Congress and the senators who do not find this out in time.

Under the demands for cheap money and free coinage of silver of full legal-tender Congress yielded, first the Bland act and then the Sherman act. Under these two bad acts the demand debt of the United States

has been increased in the sum \$500,000,000. That demand debt is a debt which the government may be at any time called upon to pay. It cannot pay with the silver without discredit, public and private, commercial ruin for the time and national dishonor. The recent but long-anticipated financial panic, coupled with a paralysis of industry for the time being, ensued on the danger of such demand being made. The recent veto of the bill for coining a non-existing seigniorage, rightly named a "vacuum" by Mr. Hewitt, has, I trust, stopped that craze. This craze for cheap money is more dangerous to the South than to almost any other section, because, lacking capital, the Southern States need to borrow and may rightly borrow for the development of their great resources. The South cannot borrow while supporting free-silver coinage. On the other hand, the South is creditor on its great cotton crop, and what fools the growers of cotton would be to part with it for any kind of money except for the only kind of money or its equivalent that will buy anything anywhere, namely, coins made of gold or their equivalent.

"But," say representatives of the South, "we want more money and we want more banks." The latter demand may be well grounded and may also be met with safety. Does the South want more bad money, more discredited money, more money of which the greater the quantity the less the credit? Surely not. Does the South want banks to issue notes that may not be redeemed? Surely not.

If, then, there is a demand for the investment of more capital in banking in this country, especially in the South; if there is a need of notes or other instruments of exchange for the conduct of every day's work to be supplied by banks, then it follows that each community, each neighborhood, each section and each State ought to be permitted to organize capital in banks and to provide for the issue of notes which shall serve the purposes of each neighborhood. But these banks must be safe or they cannot ever get started.

"But," says the objector, "that will be a return to the wild-cat bank system of fifty years ago." To this the rejoinder may be surely made that "there can be no return to that vile system, because the country is now rich and was then poor; the people are now well informed and they were then ignorant. They were the victims of knaves because they were ignorant, or else they took the wild-cat money because they could not get anything else." At the present time there is a wealth of capital and energy in this country; there is free and instant communication between the remotest parts, and ample power to command all the gold needed for bank reserves. No wild-cat bank can put out its circulation and keep it out to the danger of the community, because there is no community in this country consisting of such ignorant fools as to enable knaves to swindle them in that way. Even if there were such a community, I hold that it would be well to let them try the experiment and learn their bitter lesson for themselves. It seems to me that by way of clearing-houses and clearing-house centres, by way of quick communication, by way of rapid information about credits and also about discredits, it will be practically impossible for Southern or Western or Eastern States to put wild-cat or irredeemable bank notes upon either community in any dangerous manner.

On the other hand, the ignorance or the intelligence of a community may be gaged by no surer standard than by their prejudice against banks and bankers or by their support of them. One may be very certain that no men of sense will invest capital or start banks of any kind in any State or section that sends such misrepresentatives to Congress as many of those who are now there, by whom the stability of our unit of

value and the credit of this country have been imperiled. No sane man will invest or grant credit in a State that advocates free coinage or "cheap and nasty" money.

I know of no surer way to remedy some of these evils than by permitting such communities to try to establish banks and to try to get bankers to trust them. On the other hand, if the tax on State bank notes is removed a way will be found to establish a safe issue of notes redeemable on demand in coin made of gold under carefully-guarded conditions. Such notes will serve the purpose of every community that is fit to be trusted, while other communities may be left to suffer from their own ignorance and consequent discredit.

There is one principle which has long been comprehended, known as the Gresham law, namely, "bad money which is of legal tender drives good money out of circulation." There is another principle equally full of force, which is the converse of the Gresham law. Good money, i. e., money made of gold or its equivalent, drives bad money which is not of legal tender out of circulation. No one proposes to make bank notes a legal tender. Therefore there can be no forced circulation of them, and unless they are made good, that is, redeemable on demand in coin of the highest standard, they will not only be driven out of circulation, but they cannot even be put in circulation at all. Witness the conditions of international commerce, in which the South has so much at stake. The unit or standard of international commerce is gold, and nothing but gold. The pound sterling is nothing but a name for 113 grains of gold. There is no international act of legal tender; therefore no foreign creditor can force base money and cheap silver money in payment for the Southern cotton crop or the Western grain crop. These two sections can command all the gold reserves of the world if they need them, because they produce the fibres that Europe must have to work upon, and the food that Europe must have or go half starved. What idiots the producers of cotton and grain would be to give up that control over the best kind of money; that is to say, the sure supply of money which will buy anything anywhere and pay any debt anywhere. When the grain growers and the cotton growers of the South comprehend this question they will no longer be misrepresented anywhere. The unit of value will be sustained, and no act of legal tender will be passed which, by giving an option to the debtor to put cheap money upon his creditor while the creditor is deprived of the choice, ruins the debtor by depriving him of any credit, as it ought to. Men of capital who grant credits can always protect themselves. Men of energy who might thrive on a good and sound credit, due to their personal qualities, may be deprived of that credit by legislators who deprave the currency and degrade the standard or unit of value.

Neither the South or West can establish banks or issue bank notes, even if the bank tax is removed, until they comprehend these facts, and when they do their banks and their bank notes will be well guarded, and may be safe to serve the community by which and in which they are established.

Yours for true money,

EDWARD ATKINSON.

NOTE.—I have lately made a money estimate of the ultimate cost of the civil war, by which slavery destroyed itself and thus made way for the progress and prosperity of the Southern States. The expenditures of the United States government during the period of the war and of reconstruction above the normal expenditures in time of peace came to \$4,000,000,000. The interest and the pensions will add to the original cost not less than \$6,000,000,000 before they terminate, making a total cost of \$10,000,000,000. This seems a huge sum, but it was the inevitable result of at-

tempting to compromise the principle of personal liberty by which this nation lives and moves and has its being; in fact, this money cost is a trifle. No one may measure or attempt to measure the cost of the lives sacrificed to the principle of personal liberty. So far as this money cost of the war is concerned, it will have been met and paid by way of taxation in one generation numbering thirty-five years from the date when liberty was established and when the principles of the Declaration of Independence were for the first time made a living truth. The average annual product of that generation, beginning at a much less sum and ending with a very much greater sum, will be \$10,000,000,000 a year. The money cost of liberty to the present generation will therefore have been one year's product in thirty-five. In the mere material sense no money could have been so well spent or expended for any purpose that would have so absolutely assured material prosperity, especially to the Southern States, whose progress had been so long retarded by the existence of human slavery.

E. A.

Gold-Mining in Georgia.

SAUTEE, GA., April 21.

Editor *Manufacturers' Record*:

I have read with much interest several articles which have recently appeared in the *MANUFACTURERS' RECORD* discussing the subject of gold mines in Georgia. During the past five years I have spent most of my time investigating the deposits of gold in Georgia. During most of this time my duties were to ascertain the facts and prepare a scientific report on the gold belts of the State, exhibiting the nature and condition of the gold ores, etc. This report has been prepared, with the necessary maps accompanying it, but for want of necessary appropriation by the legislature of the State to do the assay work and printing, it has never been published. For this reason no scientific report describing the mineral resources of the State, except some insignificant pamphlets, has come before the public. The State of Georgia in 1889 established a geological survey. Besides the salaries of the officers, only \$3000 is appropriated for field and other expenses. This leaves nothing to do the necessary printing, etc., and the department is of little or no value to the State in presenting to the outside world the facts in regard to the economic resources of the State. To a scientific or an intelligent citizen of Georgia there is no fact more apparent than the prevailing ignorance in regard to Georgia's undeveloped resources. Especially is this true of the gold resources of the State. All that is known of the gold mines is from hearsay or from experts sent here, who have had no opportunity to examine anything but surface deposits. In many instances the value of gold mines have been exaggerated by parties desiring to sell gold properties. These exaggerations in some instances have caused sales of mines for more than their true value, and the result has been greatly detrimental to the gold interest of the State. Most of the failures, however, have been due to mismanagement of the mines, resulting from a want of proper treatment of the ores at the mills. The fact has been demonstrated for years that but a small per cent. of the gold contained in the sulphureted ores can be saved on the amalgamated plates accompanying the old stamp mill process. Hundreds of mining companies owning gold properties in Georgia have spent large sums of money on this process and have abandoned the mines as worthless, when the average assay value of the ores were from \$5.00 to \$10.00 in gold per ton. This process is still in operation here, and but few mines are preparing to adopt modern and sure methods of treatment. There are only a few shafts in the State more than 100 feet in depth. The work already done on the gold mines of

the State is practically a surface work. It is impossible to know fully the future of Georgia gold mines without deeper shafts, but much is known and can be inferred from the surface indications and the nature of the gold belts and gold veins. It is impossible in a short article to discuss this subject scientifically, but it may be of interest to the public to know a few facts concerning these surface indications. It has been practically demonstrated that the rich placer mines of the world occur in the vicinity of rich gold veins. All the gold taken from placer mines was deposited in veins which traverse the adjacent country rocks. Parts of the veins have been removed by water, and the gold, sand, pebbles, etc., found in the placer mines is the result of this erosion. These facts are too plain to require explanation. They are even recognized by the old miners, who have no technical knowledge of the origin and deposition of gold veins. They are, however, of great importance as an index to the nature of Georgia gold mines. If the placer mines result from the erosion of the veins, etc., and the deposition of this eroded material, evidently these mines are merely a surface indication of the veins, where erosion has not been very great. This is true of the Georgia mines for the following reasons:

1. The erosion has not been so great in Georgia as in California and other gold-producing countries—(a) the rivers and streams have not been disturbed since the paleozoic era by volcanic upheavals and overflows; (b) they have kept their original courses approximately since that era, and have had to cut deep erosion valleys through the subjacent rocks, which are indurated and not semi-disintegrated, and hence the erosion has been greatly retarded.

2. The gravel beds and placer mines all occur along the streams and erosion valleys which traverse the gold belts, and no water-worn pebbles are found on the summits of the hills and mountains.

3. The gravel beds consist not only of quartz pebbles and sand, but largely of rounded pebbles of gneiss, granite, schist, etc. It is therefore evident that these erosion valleys have been slowly forming and have acted as great "sluice-boxes," so to speak, in which nature has stored the placer gold.

But to apply the above facts to the Georgia mines. It must be remembered that there are four distinct gold belts in the State. The broadest and most important of these belts traverses Towns, Rabun, White, Lumpkin, Dawson, Forsyth and Cherokee counties, etc. Wherever large streams cross this belt rich placer mines have been worked, and when the small amount of erosion is taken into consideration, I dare say as rich placer mines as any discovered anywhere in the world. From many small areas over a million dollars have been taken away, and the adjacent veins have not been eroded into these mines exceeding eighty feet of their original height.

To illustrate these points I quote from my field notes while making a geological survey of this belt for the State. Referring to the "Yonah Gold Mines," I find as follows:

The "Yonah Gold Mines" are located near the centre of the most important gold belt traversing the State, in White county, Ga., etc. They are the consolidation of several gold mines and comprise the basin of Duke's creek for a distance of five miles, where it traverses the gold belt at right angles. The stream flows southeast, and near the southern margin of the belt, i. e., along the line of contact of the schists and granites, the valley broadens to several hundred yards in width, and it is here that the rich placer mines occurred. I learn from reliable citizens of the county that about a million dollars have been taken from these mines. These placer mines

did not cover a large area, and the erosion does not appear to have been more than fifty feet. About two miles above the rich placer mines the rich veins occur. One of these veins is eight feet in width and extends exposed nearly across the entire property. The ore from this vein assays \$7.00 to \$10.00 per ton. There are several other valuable veins traversing the property, and it was from these veins that the large amount of placer gold found below was eroded. Only the surface of these veins has been washed away. The ore in the veins is in the form of sulphurets, and cannot be separated by amalgamation. While the above mine is destined at some future time to be a bonanza to the owners, when the ores are properly treated, yet I refer to it because I am familiar with the history and nature of this mine, and know what I say to be the facts. I am also familiar with many other mines in the State, and the same facts in regard to surface indications apply to all alike.

It is not surprising that thinking business men are beginning to investigate the subject with a view to development. It is to be hoped that they will continue to do so without prejudice, and subtract from the assay value of the ores the cost of extracting the gold by modern appliances and inventions, at the same time remembering the low price of labor, timber, water-power and fuel, etc., in Georgia.

E. T. WHATLEY,
Geological and Mining Engineer.

A Georgia Placer Mine.

[Special Cor. MANUFACTURERS' RECORD.]

There have been a number of interesting plants and methods for working placer mines in north Georgia, but none so much so as the plant of the Chestatee Company, which is rather a new departure in that line, and a brief description might not be uninteresting. To preface it, however, I will say that there are considerable areas of virgin placer grounds in that section which, owing to their lying below the natural drainage, have hitherto been unavailable, as no means were at hand of disposing of the sand and gravel or of keeping out the water.

The situation at the Chestatee Company's plant has all of these objections in a most aggravated form, and in the handling of these conditions much new territory will become available for mining operations. The property of the Chestatee Company embraces several hundred acres of bottoms lying on both sides of the Chestatee river, and which has been known for many years to be underlain with deposits of gravel thought to contain free gold in large quantities. Taking advantage of a natural shoal in the river, the company has developed water-power sufficient to run its machinery, and with two 66-inch Leffel turbine wheels under about seven feet, has 130 horse-power. The wheels, while expected to operate separately, may be combined, but at present are used separately. One is attached by direct shaft and gearing to a 12x24 duplex Blake power pump, which furnishes about 100 miners' inches of water under any desired pressure up to 200 feet. This is conducted to the scene of mining operations through spiral-riveted pipes, where it is distributed to the "giants" which cut away and wash off the surface and gravel containing the gold, which is saved in the usual way—by running through sluice-boxes containing mercury in the bottom. As the slate or bed-rock is several feet below the surface of the river, the disposition of the "tailings" is the new departure and is effected as follows:

At a point considered about the lowest in the entire area an immense shaft or catch-basin was sunk into the slate, and from this drains were cut to the different parts of the workings, so that the water thrown by the giants, containing the clay it washed off, was conducted to this central

point. Here was placed a lift or hydraulic elevator of an improved pattern, and the material lifted into a flume which extends from this point to the river and deposits the entire debris into the river below the point at which the water is taken for power purposes. The river removes it so rapidly that so far there has been no trouble whatever. This lift is an improvement on the common "Georgia" lift, in that the material may be lifted one foot for each five feet head pressure, while the ordinary work is one foot for every ten feet of head. The total lift at the Chestatee is twenty feet. This lift will shortly be replaced by a No. 6 sand pump, not because it is not working properly, but as the company pumps its water and has ample extra power, it prefers to use its whole available pressure water through giants, and pump the tailings with an independent pump run by an electric motor.

The second wheel runs a fifty horse-power C. & C. electric generator giving a current of 500 volts. This is made use of both for power and lights, a twenty-five horse-power motor being used for the sand pump, five horse-power for furnishing the water for the "slate skimmers," and some five or six horse-power being used for lighting the plant, both buildings and mines. Work is prosecuted day and night, and the plan so far has the assurance of a pronounced success.

Through the courtesy of Mr. W. Crandall, the superintendent in charge of the work, the following figures as to the working capacity of the plant were obtained. He informs me that the pump furnishes sufficient water to continually operate two giants with one-and-a-half-inch nozzles under a pressure equal to a vertical head of 125 feet. With these he can "top off" surface averaging eight feet in height to the amount of 2500 square feet per each twenty-four hours, or about 740 cubic yards, at a cost of about three cents per cubic yard. The raising of the gravel containing the gold is of course less rapid, and depends much on the thickness of the gravel and other local conditions. He informs me, however, that the company considers that it can profitably handle material which will yield three cents per square foot of area on the slate if the topping does not exceed ten feet.

The ground so far worked gives an average return of considerably more than this, and with the ability to work something more than an acre each month, its results cannot fail to be satisfactory. The plant of the Chestatee Company has been well installed in the most substantial manner, and with water-power so cheaply available can, be operated in a most economical manner. Yet this is only one of the hundreds of splendid placer grounds lying untouched along the banks of the Chestatee and Yahoola rivers. GARRARD HARRIS.

Chattanooga, Tenn.

A Year's Work.

The Commercial League of Little Rock, Ark., is but a year old, yet in that time it has secured over 200 members and has been the direct means of securing two new factories for the city. It has liberally advertised the city and now has several important plans under consideration. One of these is to make Little Rock the division terminus of the Lake Superior, Southwestern & Gulf line. The executive committee of the league comprises W. B. Worthen, C. S. Stiff, Maxwell Coffin, H. F. H. Eberts, M. H. Johnson, John W. Blackwood, Oscar Davis, W. S. Holt and W. M. Kavanaugh.

THE motion made by Colonel Shoemaker, receiver of the Bristol (Tenn.) Iron & Steel Co., to postpone the sale of the Bristol furnace has been overruled by Judge Cassell, at Radford. The furnace will, therefore, go to sale as provided in the original decree.

OIL AND FOOD FROM PEANUTS.

Results of a German Experiment.

In a recent article in the MANUFACTURERS' RECORD Mr. Edward Atkinson, the eminent economist, pointed out the commercial possibilities of the peanut to the South. Mr. Atkinson predicted that the peanut possessed greater wealth-creating possibilities for the South even than cottonseed. Some interesting data on this subject is contained in a report to the Department of Agriculture by Frank H. Mason, consul general at Frankfurt, Germany.

The report touches on the manufacture in Germany of oil, oilcake and meal from peanuts, and particularly the extent to which meal is used for food in the German army and navy. There were 20 973 tons of peanuts imported into Germany in 1893. This large supply is consumed by about twenty-seven factories in the manufacture of oil. Some of the principal of these factories are located at Hamburg, Mannheim and at Heilbronn, in Wurtemberg.

The report states that the finest and most valuable peanuts come from the valley of the Senegal, in western Africa, while the lowest grades come from Madras. At the oil mills the kernels are ground or crushed and submitted to three successive pressings, in which a force of about 250 atmospheres is employed. The first pressing expels about 40 per cent. of the oil, the second 4 per cent. and the third from 2 to 3 per cent. of the remainder. Cold-pressed oil of the first pressing from African or the best American peanuts is used in Germany as a salad oil and for various culinary purposes. It ranges in price (wholesale) from \$14 75 to \$26 00 per 100 kilograms (approximately from 56 7 cents to \$1.00 per gallon), which is far cheaper than any edible quantity of olive oil can be imported and sold in Germany.

The American peanut is considered larger, sweeter, and, when roasted, better flavored than any of the others, but its oil is said to be of medium quality, ranking below the African, being worth about \$15.47 per 100 kilograms, or fifty-nine cents per gallon. Oil from the East Indian peanuts ranges in value from forty to fifty cents per gallon, and, like the last pressing from African and American nuts, is not used directly for food, but is consumed in the manufacture of soap and for various other technical purposes, among which is included the fattening of oleomargarine.

The oilcake or meal left after the oil has been, as far as practicable, extracted by pressure, becomes an important secondary product. It sells for from \$30 00 to \$33 00 per ton. Until a year or two past Consul Mason states this product was used in Germany exclusively as food for cattle, sheep, and to some extent for horses, though it is said that it is too rich and heating for working animals, and except in the coldest weather, causes excessive respiration, unless mixed with grain and fed in small quantities.

Under chemical analysis peanut-oil meal has shown such richness in nitrogenous elements that German savants look upon it as a source of cheap and highly concentrated material for human food. Along these lines Dr. Nordlinger, a chemist at Bockenheim, has invented a series of preparations from peanut meal which it is thought will play an important part in the future food economy of the German people. Among the forms are peanut grits for soups and cakes, peanut flour, a dry, light and highly palatable biscuit and diabetic chocolate biscuits.

Some valuable experiments have been made to test the medicinal properties of such food products. Peanut-meal soup was found palatable, and ate with considerable gusto by hospital patients. It was also found to assimilate well, and to

be highly sustaining. A series of experiments with such food in the German military garrisons have been attended with satisfactory results, and if the further trials to be made prove equally favorable it is probable that peanut meal will be included in the future garrison and field rations of the German army. Some deductions by Professor Konig show that in the elements of nutrition prepared peanut meal exceeds bacon, butter, skim-milk cheese, rye flour, peas, potatoes, veal, rice and other nutritive articles of food by from 65 to nearly 1500 per cent. In cheapness the advantage in favor of peanut meal is from about 50 to nearly 900 per cent. In view of these facts, the possible value of peanuts to the South becomes a subject of much interest, deserving the most careful investigation.

Rejoicing in Middlesborough.

[Special Cor. MANUFACTURERS' RECORD.]

MIDDLESBOROUGH, Ky., April 21.

There is much rejoicing in Middlesborough, as there is a prospect that at last the great furnaces and steel plant will soon be in operation. The Watts Syndicate will, it is positively stated, put its furnaces into blast just as soon as a sufficient supply of water can be assured. Our present reservoir holds about 500,000,000 gallons of water, and, under ordinary circumstances, will fill at the rate of 1,500,000 gallons per day or more. In a season of protracted drought the needs of the town and the Watts Syndicate combined could easily deplete this supply to a dangerous point. In order to avoid this the water company has agreed to raise its dam to the height of full thirty-five feet, and to duplicate its present pumping machinery at a cost of about \$40,000. When this is done the reservoir will have a capacity of 1,800,000,000 gallons, and the water-works company can then deliver for use anywhere from 6,000,000 to 8,000,000 gallons per day. Messrs. McFarlan & Congdon, of Knoxville, have taken the contract to raise and finish the dam, and to raise and reset the present pumping machinery and pumphouse. The new pumping machinery has not yet been purchased, but Capt. A. H. Martine, the superintendent, is looking around to secure that which will be best adapted to all purposes. It is the intention of the water company to push this work to completion within sixty days. When it is finished the Watts Syndicate is under obligation to put its furnaces into blast at once. When once in operation this great plant will of itself give ample support to our present town. I am reliably informed that the London board of the Middlesborough Towns Lands Co. is thoroughly aroused to the importance of having this plant in operation, and that it has made such contracts and agreements with the Watts Syndicate as to guarantee this.

At the late annual meeting of the stockholders of this company, Mr. Jno. M. Brooks, who has been general manager of the company so long, was made president, thus insuring the successful business management at this end of the line.

As the readers of the MANUFACTURERS' RECORD generally know, the Watts plant includes two furnaces and immense steel works. It is one of the most complete plants in the country, having cost over \$2,000,000.

"I BELIEVE," said a prominent New Yorker while in Virginia last week, "that the South is just entering an era of prosperity that will very soon put in operation every mill and factory now idle and result in a revival of manufacturing enterprise and prosperity that will bring millions of dollars from the products of our raw materials, and other millions from capitalists who will invest their money in Southern enterprises."

THE WEEK IN THE SOUTH.

Condition of Business and the Latest Features of Southern Progress Summarized.

Notwithstanding the strikes of coal-miners and some other unsatisfactory features, the business situation in the South shows a gradual tendency towards a general broadening out and some improvement. The immigration question is attracting great attention. Advices from the West and Northwest show that many people are preparing to go South, and in the South there is increased interest in this movement, and a number of conventions of railroad officers, governors and others are to be held to aid in the development of immigration. During the week some important railroad matters have taken shape, promising a considerable increase in railroad construction over last year. The Baltimore & Ohio has secured a large loan, of which \$2,500,000 will be expended at Baltimore in the completion of its Belt Line tunnel and depots. Street railroad enterprises are being pushed, and the MANUFACTURERS' RECORD shows that although \$15,000,000 have been expended in cable and electric railways at Baltimore during the last three years, there are now over eighty miles, to cost about \$4,000,000, under construction or to be built this summer, in addition to two lines likely to be built to Washington. A special report to the MANUFACTURERS' RECORD states that contracts have been let at Middlesboro, Ky., for the extension of the water works, about sixty days, the great iron and and that upon their completion, within steel plant built by English capitalists at a cost of over \$2,000,000 will go into operation. In West Virginia a sale of 26,000 acres of timber land has been made to Western capitalists, who will build a railroad and saw mills to develop it. A sale of 75,000 acres of Georgia pine land has been made for turpentine and lumbering. Among other enterprises reported for the week by the MANUFACTURERS' RECORD are a woodworking factory, a canning factory and a \$25,000 construction company in Virginia; a \$25,000 tobacco factory and electric-light works in Florida; a lumber mill and machine shop in Mississippi; a \$10,000 canning company, a \$100,000 land company, a \$250,000 irrigation company, a \$10,000 lumber company and a \$50,000 electric company in Texas; a coal mine and a \$75,000 woodworking company in Tennessee; a \$12,000 wagon factory in Louisiana; a \$100,000 machinery company and a \$200,000 coal-mining company in West Virginia.

Improvements at Hot Springs.

In a letter to the MANUFACTURERS' RECORD, Ward H. Mills, secretary of the Hot Springs (Ark.) Chamber of Commerce, writes as follows:

"The improvements in progress on the United States reservation at Hot Springs Ark., under the direction of the Secretary of the Interior Department and under the immediate supervision of Capt. Robert R. Stevens, are still going on. The work at present is being confined to the reservation front on what is known as Hot Springs mountain, on which are the thermal springs so widely famous for their curative properties. Over \$100,000 have been spent in this work within the past fourteen months, and the work is only well begun. The scheme of improvements contemplates the expenditure of half a million dollars or more, and will require a number of years yet for completion."

THE Petersburg (Va.) Chamber of Commerce has elected Simon Seward and L. L. Marks, vice-presidents, and R. D. Gilliam, secretary and treasurer. E. C. Venable was re-elected president, but declined to serve again.

The South Before the War.

[R. H. Edmonds in *Southern States Magazine*, of Baltimore.]

II.

For some years prior to 1850, while New England, having no soil to make profitable agriculture a possibility, was engaged almost wholly in manufacturing pursuits, all the energies of that section being directed to industrial development, the South, reaping great benefits from its planting interests, was with equal energy and success and continued expansion giving itself to the cultivation of cotton, sugar, rice and tobacco. In the growth of these staples it was producing great wealth, and it probably reached a higher degree of agricultural prosperity than any section of this country has enjoyed since that time. It is difficult to comprehend the magnitude of Southern farm products during the decade ending with 1860 and the wonderful advance that was made in that period. The energy and enterprise displayed by the South in the extension of its agricultural interests was fully as great as the energy displayed in the development of New England manufactures or that of the pioneers who opened up the West to civilization. The South has been less given to vaunting its own achievements, and the world has therefore heard less about them. But this agricultural development and prosperity were the outgrowth of the same energy that built the first railroads in the country, that constructed more mileage between 1850 and 1860 than the New England and Middle States combined, that was rapidly at the beginning of the war building up manufactures, that gave to a Southern port the distinction of sending over the first steamship that ever crossed the Atlantic. But to return to statistics. More interesting than the record of Southern industrial advancement from 1850 to 1860 is the really marvelous agricultural advancement and the magnitude of the products of Southern farms in 1860. In order to rightly value all of these comparisons it should be remembered that the total population of the United States in 1860 was 31,000,000, of which the South had 6,800,000 whites and 4,100,000 negroes, or an aggregate of 10,900,000, just a little more than one-third of the total. With only one-third of the aggregate population and less than one-fourth of the white population the South raised more than one-half of the total agricultural products of the country. Comparing the crops of the South and of the remainder of the country as given in the census of 1860, we have the following table:

Crops in 1860.	Yield in South.	Yield in remainder of the country.
Corn, bushels.....	358,153,000	472,297,000
Wheat, bushels....	44,800,000	125,200,000
Cotton, bales.....	5,196,000	none.
Tobacco, pounds....	351,500,000	77,800,000
Rice, pounds.....	187,100,000	none.
Sweet potatoes, bus.	38,000,000	3,600,000
Sugar, pounds.....	302,000,000	none.
Value of live stock... \$197,498,354		\$639,991,852
Molasses, gallons...	16,314,818	22,232
Beeswax and honey, pounds.....	13,551,151	12,835,704
Value of animals slaughtered....	\$84,447,110	\$128,424,543
Value of home made manufactures.....	\$16,585,281	\$7,672,941
Peas and beans, bus..	11,878,452	3,309,661
Wool, pounds.....	12,565,337	47,946,066
Cash value of farms... \$2,308,409,352		\$4,330,004,869

It would be hard to set forth more convincingly than these census figures do the strong position held by the South agriculturally as compared with the rest of the country. The world generally credits the South of 1860 with having been only a producer of cotton, rice and sugar, but as previously pointed out, the industrial and railroad interests were building up with great rapidity when the war came, and these figures exhibit a condition of agricultural prosperity that must amaze those who have regarded the old South as a country lacking in energy. With one-third of the country's population and only one-fourth

of the white population, the South not only produced all the cotton, rice and sugar raised in the United States—these were all practically surplus cash crops—but also raised 358,000,000 bushels of corn, or 44 per cent. of the total crop of the country in 1860; 351,500,000 pounds of tobacco, against 77,800,000 pounds in the rest of the country; 38,600,000 bushels of sweet potatoes out of a total crop of 41,600,000 bushels; it had over 40 per cent. of the total value of live stock of the country, or \$467,498,000 out of \$1,100,000,000; it made 16,000,000 gallons of molasses, against 22,000 gallons made by other sections; it produced beeswax and honey to the extent of 13,500,000 pounds, or over one-half of all made in the country; the value of the animals slaughtered was \$84,400,000, against \$128,000,000 in all other sections combined, and out of a total value of what were classed as "home-made manufactures" of \$24,300,000 the South had \$16,500,000. One of the most interesting features of this exhibit is the production of beans and peas. Some months ago Mr. Edward Atkinson wrote a magazine article to show that the South "needed beans," claiming that its lack of knowledge of beans was one of the serious hindrances to its agricultural advancement. A Mississippi editor, S. A. Jones, of Aberdeen, I believe it was, reminded Mr. Atkinson that he had failed to study Southern agricultural history; that Boston's intellectuality might be due to eating beans, but that even before the war Mississippi alone raised more beans than all of New England, and he might have added, of the Middle States included. In 1860 the whole country raised 15,000,000 bushels of beans and peas, and of this quantity 11,800,000 bushels were produced south of Mason and Dixon's line. The cash value of farms in the whole country in 1860 was \$6,638,000,000, and though the South had only one-fourth of the white population, the value of its farms was \$2,300,000,000, more than one-third of the whole, and an increase of \$1,300,000,000 over 1850. With only 33 per cent. of the country's population, including slaves, it had \$95,000,000 invested in agricultural implements out of a total of \$246,000,000, or nearly 40 per cent. The increase in the value of its agricultural implements from 1850 to 1860 was nearly \$35,000,000, or about 60 per cent.

Such is the truly marvelous record of agricultural activity, an activity that would put beyond the possibility of a doubt the remarkable energy of the people of the South, even if under the concentration of capital and work in agriculture there had been little or no progress in manufactures and railroads.

But examine other statistics, and the South's position bears the comparison fully as well as in those just given. In 1860 30 per cent. of the entire banking capital of the country, or \$117,400,000, was in the South. When the census of 1860 was taken the South ranked very high in wealth as compared with the rest of the country, showing its people were not slothful in the business of money-making. In that year the assessed value of property in Georgia was greater than the combined wealth of Maine, New Hampshire, Vermont and Rhode Island; South Carolina was \$68,000,000 richer than Rhode Island and New Jersey; Mississippi outranked Connecticut by \$160,000,000. In the assessed value of property per capita, Connecticut stood first in rank; Rhode Island, second; South Carolina, third; Mississippi, fourth; Massachusetts, fifth; Louisiana, sixth; Georgia, seventh; District of Columbia, eighth; Florida, ninth; Kentucky, tenth; Alabama, eleventh; Texas, twelfth; New Jersey, thirteenth; Maryland, fourteenth; Arkansas, fifteenth; Virginia, sixteenth, and Ohio, seventeenth. New York and Pennsylvania were also far behind the South in the amount of wealth in proportion to popula-

tion, the former State ranking twenty-second and the latter thirtieth. In 1860 the total assessed value of property in the United States was \$12,000,000,000, and of this the South had \$5,200,000,000, or 44 per cent.

The business world knows in a general way something of the progress of the South since 1880; it gives that section credit for a wonderful advance, but it takes for granted that as a result of this recent prosperity the South is wealthier now than at any former time. Wonderful indeed has been the South's increase in values in the last ten years, but with all this growth the assessed value of property in the South today is a little less than it was in 1860, or thirty-three years ago.

Only by such a comparison as this can the loss of the South by the war be measured. Even then we cannot fully realize the degree of poverty which it entailed. Contrast the South of 1860 and the South of 1865. In one case we see a country increasing in wealth enormously, adding over \$1,300,000,000 to the cash value of its farms in ten years, spending \$220,000,000 in the same time in the extension of its railroads, \$35,000,000 in an increase of agricultural implements and many millions in new factories and new banks. In the other we find at the close of the most disastrous war in the world's history a degree of poverty and woe which no language can portray. For four years contending armies had occupied its territory, and proved that General Sherman was correct, if profane, when he said that even at its best "war was hell let loose." Desolation had swept over the land, leaving only blackened chimneys to mark the site where dwellings and factories had stood; fences were gone, farms were in ruins, and the returning soldiers, who had given four years to battle, returned only to take up the burden of life faced by conditions more appalling than the people of any other nation had ever met. Over the whole land poverty, and worse than poverty—despair—brooded. Debts had accumulated and the outlook for the future was more gloomy than even a Dante could fully picture.

Hundreds of thousands of the best men of the section had been killed or seriously wounded, while thousands, unable to see any hope for improvement, went West or North to find a home. Then came the absolute demoralization of the labor system, followed by political misrule and debauchery of the whole State governments, with the most unscrupulous white adventurers using ignorant negroes as their tools to enable them to carry out every gigantic swindling operation which fertile brains could invent.

The census of 1870 showed a decline in the assessed value of property in the South since 1860 of \$2,100,000,000, and the reign of terror or reconstruction period made another decrease of \$300,000,000 between 1870 and 1880. This, however, was but a moderate part of the loss. The cost of the war, the destruction everywhere visible, the hundreds of thousands of the most vigorous men in their graves or permanently disabled, the South's share of national indebtedness, all summed up, would mean an aggregate loss of over \$5,000,000,000. How can we comprehend the meaning of such figures? This vast sum is eight times as great as the combined capital of all the national banks in the United States, and is greater than the aggregate capital invested in manufactures in the United States. Blot out of existence in one night every manufacturing enterprise with all the capital employed, and the loss and chaos would not equal the South's condition in 1865. With the changed political conditions after 1876 there came some signs of returning prosperity, but it was not until about 1880 that the improvement was sufficiently decided to attract general attention.

It has been stated already that in 1860

the assessed value of property in the South was \$5,200,000,000 out of a total of \$12,000,000,000 in the entire country, or 44 per cent. In ten years there was a startling change. In 1870 the South had only \$3,000,000,000 of assessed value, while the total for the whole country was \$14,170,000,000. While the South grew poor the North and West grew rich as never before. In 1860 the assessed value of property in Massachusetts was \$777,150,000, compared with \$5,200,000,000 in the South; in 1870 Massachusetts had \$1,590,000,000 of property and the South \$3,000,000,000. Such was the poverty of the South that the one State of Massachusetts listed for taxes more than one-half as much property as the fourteen States of that section could show. The assessed value of property in New York and Pennsylvania alone in 1870 was greater than in the whole South. South Carolina, which in 1860 had been third in rank in wealth in proportion to the number of her inhabitants, had dropped to be the thirtieth; Georgia had dropped from the seventh to the thirty-ninth; Mississippi, from fourth place to the thirty-fourth; Alabama, from the eleventh to the forty-fourth; Kentucky, from tenth to twenty-eighth, and the other States had gone down in the same way, while the Northern and Western States had steadily increased in wealth. In 1860 the assessed value of property in South Carolina, according to the census, was \$498,000,000, while the combined values in Rhode Island and New Jersey aggregated \$421,000,000, or \$68,000,000 less than South Carolina's; of course, the true value is always greater than the assessed value. In 1870 the combined values in Rhode Island and New Jersey amounted to \$868,000,000, and the value in South Carolina was \$183,000,000. Thus, while South Carolina had \$68,000,000 more assessed property in 1860 than these two States, in 1870 their wealth exceeded South Carolina's by \$685,000,000. Notwithstanding the mighty industrial advance in the South during the last ten years, the building of nearly 25,000 miles of railroad and the increase in agricultural production, the assessed value of property is not yet quite as great as it was thirty years ago, and Maryland—a border State—and Florida and Texas are the only States which have as much wealth now as in 1860.

Building Activity of Fort Worth.

FORT WORTH, TEXAS, April 20.
Editor Manufacturers' Record:

An oil mill is being organized, and I think there is but little question but that it will be built and in operation this season. Considerable building is going on; besides a large number of residences, there are in progress several store and office buildings; one 100x95, three-story, is nearly completed; another 50x95 is now two stories high and will cost \$14,000 to \$15,000. A duplicate of this on a lot adjoining will be started in a few days, and the owner contemplates possibly building a third. Work commenced this week on a block of buildings 100x200; the intention was to build two stories, but four are now being discussed. A Dundee (Scotland) syndicate owning 150x100 feet have decided to build; plans according to instructions have been drawn and forwarded for approval. All these are substantial brick or stone and iron buildings. Several others in prospect might be named, but they are not yet a certainty. Our courthouse is being pushed rapidly ahead. It is faced with granite and will be an imposing building. The cost is between \$350,000 to \$450,000.

GLEN WALKER, JR.

THE recent discovery of gold ore at Laredo, Texas, has been followed by an investigation which is reported to have demonstrated that there is an abundance of ore that will yield good profits to work. The result has been the organization of a company with a capital stock of \$100,000 by Mr. M. F. Fernandez and others for the purpose of engaging in gold mining.

BUSINESS CONDITIONS SOUTH.

Extracts from Letters to the Manufacturers' Record.

Cleveland, Tenn.—The Cleveland Fire-Brick Co.: "We are pleased to state that, judging from the inquiries we are now receiving, we will have a fair trade this spring and summer."

Jacksonville, Fla.—Chapman & Sudlow, manufacturers of fertilizers: "Business has started very well with us, and outlook for summer trade very fair indeed."

Rusk, Texas.—J. W. Summers & Co.: "Fruit crop is badly damaged; not over half crop of peaches."

Winston, N. C.—Kerner Bros.: "Business is very much improved, and the outlook is very bright, especially after so much depression."

Cleveland, Tenn.—Tennessee Lead Mining Co.: "Business is improving, we think."

Americus, Ga.—Thos. S. Greene: "The outlook for business in this section is, I think, encouraging. The farmers are in a better condition than they have been for several years."

Cumberland, Md.—John T. Edwards: "This city has not felt the hard times as much as some other places, and many improvements are going on."

Ybor City, Fla.—The Ybor City Ice Works: "Business prospects are first-rate here; eight or nine new cigar factories coming here this season."

Huntsville, Ala.—J. W. Skinner: "Business outlook is very poor in this locality."

Dallas, Texas.—The Showalter-Lincoln Co.: "Think business is improving slowly; it is so with us."

Russellville, Ark.—W. G. Weimer: "The business outlook is good."

Earlington, Ky.—Hecla Coal Co.: "Sorry to say the outlook is not very favorable on account of general business depression."

Galveston, Texas.—W. L. Moody Co.: "Business outlook good. A new opera-house will be built here this summer, and two cotton sheds and one cottonseed shed will soon be built on the docks."

Welch, W. Va.—Charleston Coal & Coke Co.: "Outlook fair, considering times."

Cloverport, Ky.—The Patton Vitrified Brick Co.: "Prospects quite good."

Tuskaloosa, Ala.—Walter Smith & Co., coal miners: "Decidedly mixed in our business on account of general strikes of miners everywhere."

Barton, Md.—The Piedmont Lumber Co.: "The requirements and movements of lumber in this section are very slow. We are moving some kinds of lumber, such as poplar and bass; oak is slow; but the demand is far from a full volume, such as last spring, and rather of a spasmodic character. Values are low, with but little indication of advance. We are, therefore, carrying more lumber than ever before on our yards, and don't look for much revival before fall. Half time is still the basis for working through this section."

Wheeling, W. Va.—Augustus Pollack: "Industrial and commercial interests of this section depressed by the crippled condition of the country; cannot recover until intelligent and patriotic legislation raises the present congressional trade blockade."

Clifton, Texas.—W. S. Helm & Co.: "Prospects are not bright; money seems to be very scarce; everything low; crop prospect good."

A CONVENTION of Southern governors and others in the interest of immigration to the South has been called to meet at Augusta, Ga., on May 30. Plans are being made to make the affair an important gathering, and the co-operation of a number of influential men has been secured. Richmond, Va., will hold a convention of real-estate men, railway representatives and editors for the same object.

The Labor Question.

KENSEE, KY., April 12.

Editor Manufacturers' Record:

Some wit has compared the marriage state to a pair of scissors—often apart, but woe to anything that comes between them.

In view of the signs of the times—times which are pregnant with problems that must be solved sooner or later by each section of society—it follows that the labor question is the question of the hour in the industrial sections of the community; and the relations of capital to labor can be very well compared to a pair of scissors too.

Like the blades of scissors, strictly apart, but bound together to produce the necessities of mankind, each has become the fulcrum of the other from common necessity, and thereby they have accomplished more than Archimedes dreamed of when he prayed for a fulcrum to lift the world, because in the short period of a century these two levers, operated by the genius of man, with the necessities of man as inspiration, have raised a new world out of the wilderness which has come to be a city of refuge to the Old World's oppressed, because it is the home of the brave and the free.

These two forces or levers have accomplished so much that, like Alexander, they seek other worlds to conquer, now that overproduction dispenses with the favored conditions which enabled the producer to dictate prices. But they cannot agree as to the location of the fulcrum or the relative length of their respective levers, because each claims that "it" has contributed more than the other to the national prosperity, and therefore entitled to the lion's share of the profits.

During these egotistic quarrels the "strike" monkey steps in to consume the savings of years, just to illustrate more forcibly "that experience is a dear school, but 'fools' will learn in no other," and thus we have the labor question.

Let us bear in mind that capital can do nothing without labor, and labor is as helpless without capital for any special purpose as the detached blades of a pair of scissors.

The demands of capital should be fair interest and the creation of a reserve that would return to the investors their capital when the investment exhausts or expires.

Labor should receive a living wage plus an amount sufficient to enable it to create a reserve fund to maintain the living wage when sickness and old age make manual labor a burden.

Hitherto these conditions have more or less existed, but the effect of the proposed tariff legislation on the relationship of capital and labor forbodes evil, owing to the difficulty to convince labor that trade environments will be changed.

The producer no longer dictates prices, but the consumer.

Capital will have to be satisfied with a little less interest on its investment, and labor must contribute its share to the general deficit.

The only question is, how shall we arrive at the adjustment intelligently and without the necessity of a strike?

All mines contributing to the same territory and catering to the same trade should have a central governing board composed of operators and employees representing every section of such a district, whose duty should be to investigate market conditions and to regulate wages, to enable each section to secure its share of the general trade. This would, as a matter of necessity, call for a very intelligent consideration, as the relative prices paid for similar labor must be thoroughly tabulated to show at a glance the differences of different sections. These differences, with a thorough understanding as to relative conditions of mining and freight rates, will give each section an intelligent grasp of its trade environments. If it is impossible to do this on a large scale, why not do it in sections or districts?

The operators of each district ought to find no difficulty to co-operate among themselves or to overcome the prejudice of bending to a recognition of labor by meeting it in general conferences for their common good. Let us not forget that our new environments, if the Wilson bill becomes a law in its present shape, will make it necessary to produce a species of "refined cruelty" to impress the masses that in order to adjust ourselves to these new environments labor must be "squeezed" to enable capital to exist. Interest must be returned for capital invested whether there is protection or free trade.

No interest, no capital, and labor goes begging.

It is only a question of how much labor can be squeezed under this refined process of cruelty before the victim's indignation is aroused, and in its rage rends and destroys the very means of its support or the fulcrum of its utility, simply because it was not received into the council of capital and made to understand that the environments created by legislation dictated by the "fetich" of party platform is the curse of present conditions and the common enemy of both capital and labor.

If there is one evil that we suffer more from than another, it is ignorance of our relative labor and trade conditions.

The chief incentive to more information in the past was a strike in the one case and the juggernaut of competition in the other, and unless something is done to improve our facilities to better knowledge nothing short of annihilation awaits the weakest in the struggle for existence, much less supremacy in the days of overproduction.

Establish a bureau of general mining information available to both capital and labor, and you pave the way to knowledge that ought to facilitate very much the necessary adjustments in the relationship of capital and labor. Labor will be able to see that the real cause of its oppression lies more at the altar of the demi-god of party platform, party measures and trade conditions than in the so called tyranny of capital and barons of labor. Labor then will join with capital in its demands that Congress shall legislate on the line of America for Americans, as no American workman earning \$500 per annum would change with his European neighbor earning \$200 to \$300 for the same labor simply because his European neighbor lives cheaper. Does he? Let us see:

Rents—The same, only a little better house for the European.

Fuel—The same.

Food—Heavy and fancy groceries, about the same in value.

Clothing—Hats and shoes, one-half the price in England compared with America.

Tobacco—Every man's friend, about one-half price in America.

Fresh meat—One-half price in America.

Actual tests given me by several miners clearly prove that the advantages and disadvantages balance one another, and if anything, favor the American mode of living. This is evidenced by the indisputable fact that a young man in Europe cannot secure board and lodging with such a good table as an American for \$15.00 per month. This can be farther evidenced that a thrifty, industrious miner with a family of three can save at least \$150 out of \$500 per annum, when the performance of the same labor on the other side would not enable him to save anything. I merely mention this to show the necessity of more knowledge along the whole line of the labor question that will enable capital and labor to co-operate to demand the amending of a measure that can only result in disaster to mine owners and in lowering wages to the European standard, because "every product which goes to market must meet every other like product on equal terms. If in the United States there are higher wages and a higher cost of capital, there must be

such barriers against goods from abroad as will equalize the higher cost, or the products of the United States cannot be sold except at a loss. Sales at a loss cannot long continue."

Who will be the chief sufferer from such a condition? Labor, and labor through its suffrage can "mend" Congress by ending the political career of men who have nothing but theory as the basis for their legislation.

Such being the general condition, it becomes the duty of capital and labor to pull together in the same boat. Their interests are not inimical, and though differences will naturally occur, yet, like the scissors analogy of the marital state, they will co-operate with less friction when they know each other better; and when there will be a thorough understanding and recognition of their respective interests it will be woe to the common enemy that, like the Wilson bill, seeks to blindly destroy both.

HYWEL DAVIES.

Questions About Farming—Who Will Answer "Farmer?"

ROANOKE, VA., April 14.

Editor *Manufacturers' Record*:

Knowing the deep interest you take in all things pertaining to the welfare of this section, I send you the following, suggested by several speeches delivered in this city last Tuesday at a meeting called to devise ways and means for the holding of a fair or exposition of the varied resources and industries of southwest Virginia, with the ultimate end in view of inducing a large movement both of capital and population in this direction.

First as to the farmers whom so many of the speakers appeared very desirous of a tracting hitherward. It is safe to say that the settler who comes to investigate won't care one cent about who our fathers or our forefathers were; he will not care to know how much we lost and suffered by the late war, or how much our condition has improved since that event, but the questions he will ask if he be fairly intelligent (and I take it for granted that the more intelligent he is the more welcome he will be), will be something like these, and in proportion to our ability to answer them in the affirmative, in that proportion will be our chances of inducing him and others like him to cast his lot with ours. Instead of inquiring as to our pedigree, he will want to know if we are good, law-abiding citizens. He will ask: Have you good free schools, and are they numerous enough to be fairly accessible? Have your churches and stores and shops and mills reasonably near to the farms? Are your laws just and equitable, and will they give me due protection? Would they allow me to vote as my conscience dictates, and insure that my vote be counted for the candidate of my choice? These questions having been answered satisfactorily, he will ask a few more, something after this fashion: Is your soil naturally good? Is the country well watered and is the water good? Is the climate reasonably mild and healthy? Should I conclude to purchase a farm in your section, what are the facilities for disposing of my surplus crop at fairly remunerative prices? Given naturally good soil, good water and plenty of it, good timber for buildings and fences, mild climate and a chance to sell my surplus crops, at what price per acre do you hold your land, and must I pay all cash, or can a part of the purchase money remain upon mortgage for a short term of years? He will understand, of course, that the price of land will largely depend upon its present state of cultivation, its proximity to towns and railroads, and the character of its buildings and fences.

It may strike you that my emigrant is asking a good many questions, and some of them of a rather strange character considering that he is only an emigrant, but you must remember that he is an intelli-

gent emigrant, and that he knows that his contemplated home is not to be in a new territory. He knows that Virginia was the earliest settled State of the Union; he knows that her sons and daughters have been wont for generations to boast of the Old Dominion's superior brand of civilization and of their own incomparability socially, morally and every other way, and he will expect and have a right to expect much more of the comforts and luxuries of life in such a State and among such a people than he would find in a newly-settled community.

And now what of the thought which pervaded some of those speeches mentioned above—that by so dividing the farms that every man could do his own work and have to hire no one to help him. Is the argument all in favor of that proposition? If so, who is to feed the miner, the manufacturer, the storekeeper and the mechanic, who, with their families and their uncles and their aunts, we hope to see following quickly in the footsteps of our agricultural friend, or mayhap preceding him into this promised land?

It is safe to say that one cannot raise upon our average land much, if any, more than enough to maintain himself and the family which he is pretty sure to have around him. As soon almost as his boys and girls become of any practical assistance to him they will begin to think of having homes of their own, and, soon acting upon that thought, will leave the old man with diminished strength to get along as best he can, and the chances are that when that time arrives he will not have been able to save anything with which to pay anyone to assist him. This picture is not an attractive one, but I have looked upon its like more than once. Again, in every rural community, and this is no exception, there are those depending in whole or in part for a living upon such wages as they may earn as farm laborers. Under the one-man-farm system what becomes of this class? Since writing the above I have read in yesterday's Philadelphia Press an article touching upon the question of large versus small farms. Perhaps you have read it. Pardon these hastily-written lines, and accept as my excuse for bothering you with them the hope that you may be able satisfactorily to answer some of the questions therein involved, which, I am free to confess, is beyond my power to so answer for myself.

FARMER.

Truck Farming in a City.

The New Orleans (La.) Swamp Land Reclamation Co. now owns about 3000 acres which are located within twenty minutes' ride by electric car from the centre of the city. In a letter to the MANUFACTURERS' RECORD President Chas. Louque, of the company, details its plans as follows:

"Under the proposed improvements to be made in the present system of drainage of the city of New Orleans, in the limits of which the tracts of land owned by this company are located, there is no question but that this land will be rendered susceptible of the highest grade of cultivation, as it is very fertile. With the advantages we have of climate, unsurpassed inducements will be offered to those who are acquainted with and fully understand the latest modes of truck farming. This city has rapid communication with all parts of the United States, thus opening up a market for all early produce. This tract of land is now traversed by two railroads, two shell roads and a good road which it is proposed to turn into a shell road. So soon as the proposed improvements are completed, which we hope will be in the course of a year, these tracts of land will be sub-divided and sold on favorable terms to bona fide occupants. We consider we will have room for 1000 people who can locate on our lands."

An Open Letter to Southern Senators.

WASHINGTON, April 23.

Gentlemen—First of all, I beg each of you to remember at this most critical hour these most excellent words of advice:

"The friends thou hast and their adoption tried, Grapple them to thy soul with hooks of steel; But do not dull thy palm with entertainment Of each new-hatched, unfledged comrade."

Though most of you differ from Senator Hill and Senator Smith, of New Jersey, in some particulars, there is not a man among you who at heart does not most cordially endorse at least this one utterance of the latter's, to wit: "Party ties grow weak when they make disregard of one's own convictions and disloyalty to one own's people the test of fealty." Your "common bond," your test of fealty, has been the maintenance of local self-government by white men throughout our part of the country, to the end that the true welfare of all classes may be best subserved. If you do anything to jeopardize this kind of local self-government at the South, you will be allowing yourselves to be hoodwinked into a "disregard of your own convictions," and you will be guilty of an act of "disloyalty to your own people" for which within a twelvemonth—it may be a little longer—they will turn upon and rend you.

Since it has become apparent that the passage of the pending so-called tariff bill in its present form will lose to the party which has all along opposed interference with local self-government at the South the States of New York and New Jersey and Connecticut, no calm-minded, cool-headed man can fail to ask himself whether, since it has been admittedly necessary to make some concessions in order to pass any sort of bill, it would not be better to make concessions enough not only to pass an act which will substantially carry out your party's pledges, but one which at the same time will make sure of retaining in that party's ranks the States of New York, New Jersey and Connecticut.

Suppose you make the necessary concessions and pass a bill that some of you may not be satisfied with, but nevertheless one which will be accounted at least a long step in the direction of tariff reform, and thereby insure a continuation of democratic rule and a certainty of the continuous enjoyment of exemption from any election laws which might harass and rack the South, I beg to ask you seriously, aye, solemnly, if this would not be a result fraught with infinitely more satisfaction than to have to go back, as you surely will, if you insist upon taking the bit in your teeth in this emergency, and say to the people, "We went after a whole loaf, and not being able to get it, we scorned even two-thirds or three-fourths of a loaf; and while fighting the uncompromising battle for a whole loaf we have let the tares take the wheat fields, and now it is going to be a long, long time before we will have another chance to get even half a loaf."

There is no hope for a perpetuation of democratic rule without the aid of the States just named. The plain people of those States have with singular unanimity endorsed the positions taken by Senator Hill and by Senator Smith. If you refuse to hearken to this warning, despising time-tried friends for the sake of "new-hatched, unfledged comrades," the South will be the sufferer, and will hold you to a strict responsibility for sacrificing a vital interest for the sake of an untried theory.

You do not know, after all, whether free trade would find favor with even the farmers. If the very wisest among you should go and advise the members of a grange to revolutionize their agricultural methods and adopt a new system of "book-farming," how many of "the horny-handed"

would act upon your advice? It is true they are all discontented and ready enough to applaud revolutionary industrial experiments in respect to interests other than the agricultural, but just as soon as any economic theory shall prove ineffectual to "make money more plenty" they will promptly repudiate it and its authors. If farmers are unwilling to make changes in their methods, why ought they to demand for others a departure from a doctrine which from time immemorial the democracy has been advocating, to wit, a tariff for revenue with incidental protection. The protectionists rushed to one extreme in the McKinley act, but is that any justification for wise men to be driven to the other extreme by insisting upon such features of the Wilson bill as, for instance, the one which will have for its result the creation of a foreign coal monopoly at the expense of our own great and growing coal mines?

Who will believe your report when you go home and try to explain so patent a disregard of your own convictions and such damnable disloyalty to your own people as would be the crippling of the coal industries of Maryland and the two Virginias directly, and indirectly those of Kentucky, Tennessee and Alabama, because, forsooth, the stockholders in the Dominion Coal Co., Limited, demand it? Who, I ask, when you come to make explanations of this monstrous piece of class legislation, will be found willing to accept any apology or excuse?

An increasing development of the resources of the South, the maintenance of local self-government by the best elements of society for the good of all—these are what will come of patriotic concessions at this critical hour.

In conclusion, I will ask every Southern senator to read the following from an editorial in the Richmond (Va.) Times, in which, after quoting a large part of Senator Smith's great speech, which it declares that every Southern man should read and ponder, it is asked:

"What have the heroic democrats of New Jersey and New York done that we of the South should turn on them and treat them as if they were highwaymen and freebooters? Did they deserve this treatment at our hands when they rolled up those majorities in the fall of 1892 that killed the force bill and rescued us from the horrible fate that Mr. Reed and Mr. McKinley had in store for us?"

"Mr. Smith is but doing his duty to his party when he warns the Southern democrats that if they are determined to force the issue between republicanism and the communism of the populists and socialists, the northern democrats will co-operate with the republicans."

"Republicanism is no doubt one of the greatest evils possible under the sun, but populism and communism mean anarchy, chaos and the ending and destruction of our whole social system."

If Southern senators heed not such warnings it will not be many days before they will put themselves in the light of obstructors of tariff reform and enemies to the true interests of democracy and the true interests of their own constituents.

THOMAS P. GRASLEY.

ACCORDING to a dispatch from Savannah, the Suwanee Turpentine Co., of that city, has purchased, through its representative, Mr. Jno. R. Young, a tract of 75,000 acres of wooded land in Clinch county, Ga., near the Okefenokee swamp. It is, of course, intended to develop this land for turpentine, and the saw-mill privileges on it are said to have been bought by Messrs. Dale, Dixon & Co., of Josselyn, Ga., and they will follow up the turpentine operators in clearing the large area.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department, on page 216.]

Planning a New Trunk Line.

A new east and west line through Arkansas, with through connections at either end, is the extensive project of the Little Rock, Hot Springs & Texas Railway. Exclusive mention was made by the MANUFACTURERS' RECORD last week of the letting of contract for a portion of this line. At the head of the company is Uriah Lott, whose remarkable resources as a railroad builder enabled him to start out and build the San Antonio & Aransas Pass Railroad with a wheelbarrow as the sole capital and equipment at the initiation of the enterprise. His new departure aims to build a line at first from Little Rock via Benton to Hot Springs; thence, crossing the Ouachita river, build westwardly to Wister Junction, I. T., to connect with the St. Louis & San Francisco Railroad, making a short route westward to Fort Smith, Ark., and Paris, Texas. Part of the scheme is the eventual extension of the road to Memphis on the east, and to a connection with the Missouri, Kansas & Texas in the west. Mrs. Hetty Green, of New York, who is largely interested in Western lines, is said to be one of the financial backers of the new road. Her interest in the project is explained by an accredited ambition to establish a new trunk line to the Rio Grande, having great faith in the future trade development between the Mexican republic and the United States. Pursuing this plan the Little Rock, Hot Springs & Texas Railroad would, after its completion to Wister Junction, I. T., be built to Paris, Texas, there meeting the Texas Midland, a Hetty Green road, now being extended from Roberts to Paris. A connection with the Louisville & Nashville system at Memphis would furnish the eastern outlet.

Work on the line between Benton and Hot Springs is in active progress. The contracts were let last week, and the contractors went immediately to work. The work of clearing and grading is now going on over a stretch of thirty-five miles. The contractors for grading work between Hot Springs and Benton are as follows: J. H. Barrett, San Antonio, Texas, three miles; Johnson & Hanson, of San Antonio, three miles; J. E. Collins, of Fort Worth, three miles; Kennedy & Carter, of Summit, Ill., four miles; Spencer & Maney, of Oklahoma, ten miles. The company will grade the first five miles by day labor. Under the contracts the work must be completed by August 10 next. The tie contracts were let April 21. W. F. Hopkins, Laclede Building, St. Louis, Mo., has been appointed purchasing agent for the road. The chief contractor and engineer is Col. J. P. Nelson, of San Antonio. E. Foster has charge of the accounting department, and R. Myers is chief draughtsman. That portion of the road between Benton and the Ouachita river is to be completed before January 1, 1895.

Funds for B. & O. Betterments.

To secure ample funds for carrying out the Belt Railroad and new depot projects in Baltimore of the Baltimore & Ohio Railroad, upon which work has been in progress for several years, the Baltimore Belt Railroad Co. has executed a second mortgage for \$2,500,000. The first mortgage on the Belt property is for \$6,000,000 of 100-year 5 per cent. bonds executed in 1890. Of these, \$5,000,000 worth were marketed at about 102½. The second mortgage is to secure an issue of 40-year 4½ per cent. \$1000 bonds. Additional funds were found necessary, owing to unexpected difficulties and expenses encountered in construction and obtaining

right of way. Several expensive depots to be built are also provided for by the loan. The impression is that the Baltimore & Ohio, which controls the Belt Line, intends floating a new loan, which, added to the second mortgage of the Belt road, will make \$10,000,000 of new securities to be floated by the company.

The condition of the Baltimore & Ohio road is indicated by the last statement made public, which shows that the net earnings for the last nine months increased \$302,668.18. The usual semi-annual dividend of 2½ per cent. was declared to stockholders.

The "Three Cs" Railroad Outlook.

The Philadelphia Times states that the "Three Cs Railroad," the securities of which are largely held in Philadelphia, "is now on a self-supporting basis. During the past six months the North and South Carolina divisions have not only earned operating expenses, but something in addition, as against a deficit for the corresponding period of last year. The Tennessee and Kentucky divisions are also said to have made a good showing. The business of the road as a whole is steadily improving and will continue to increase, as a number of new industries, including an ore-reduction plant and phosphate works at Blacksburg, cotton mill at Camden and other enterprises, are being established." The Times says that competent judges "declare that the entire line is at least in a condition where any new money expended in the way of construction or extension will not only easily earn its interest, but will also produce sufficient additional revenue to cover in part interest on money already invested. It is estimated that \$5,500,000 new money would complete the road as projected, including extensions into territory rich in traffic. An announcement in this connection will be, it is understood, soon made."

If this road can succeed in sustaining itself during the present times and under the present circumstances, this fact ought to be accepted as a proof of the great possibilities of the line. Few people understanding railroad matters have ever imagined that this road could pay its expenses in the shape in which it now is, whereas if completed as originally projected across the mountains and made a complete line it would open up one of the most remarkable mineral and timber regions of America. With the extension across the mountains made and a revival of trade throughout the country there would be no lack of business for the Three Cs Railroad.

An Important East Tennessee Railroad Move.

The MANUFACTURERS' RECORD learns from official sources that the East Tennessee, Virginia & Georgia Railroad, through Messrs. Drexel, Morgan & Co., has secured control of the Knoxville, Cumberland Gap & Louisville Railroad.

It is a very interesting question, to be solved only in the future, as to how this change will affect the railroad situation in that section. The ultimate result will probably be the forcing of the Louisville & Nashville Railroad to build from Jellico to Knoxville, and either to secure the Marietta & North Georgia, or else to build a separate line from Knoxville southward.

Millions for New Orleans.

A dispatch from New Orleans contains the announcement that a syndicate of New Yorkers, including H. B. Hollins & Co., Emanuel Lehman and Peabody & Co., have decided to place \$4,000,000 in securities of the New Orleans Traction Co. to enable it to rebuild and equip all its lines with electric motors. The extent of the investment is an indication of the faith Northern people have in New Orleans and the South as a field for profitable ventures.

ELECTRIC RAILROAD BUILDING.

Great Activity in the Construction of Electric Railroads in and Around Baltimore.

Baltimore is today probably the most active electric railroad centre in the country. For three years we have been busy building electric and cable lines. A great many people imagined that we would reach the limit as soon as the old lines were changed from horse cars to cable and electric-power, but instead of this we find increasing activity. During the last two or three years about \$15,000,000 have been invested in the construction of electric and cable lines, and about eighty miles of additional road are now under construction or will be built this summer. Probably no other city in the United States can show such a record of activity and so many lines built and projected as Baltimore.

We append a list of the new roads proposed or under construction in and around Baltimore, which will be of special interest to those who note the rapid development of this city:

The Baltimore, Middle River & Sparrow's Point Company intends building an electric road from a point in the eastern suburbs to Sparrow's Point, passing near several hotels and fishing shores. The length of the line is estimated at fifteen miles. George R. Willis and F. W. Trimble, of Baltimore, and several Philadelphia people, it is understood, are interested.

The Canton, Sparrow's Point & North Point Railway Co. intend building an electric road from or near the terminus of the Central Railway in the city to North Point, at the mouth of the Patapsco river. The distance is ten miles. Prest. F. W. Wood, of the Maryland Steel Co., and T. Wallis Blackstone, of Baltimore, are among the members of this company.

The Baltimore, East Baltimore & North Point Company holds a franchise which was renewed March 17 to build an electric line between the points named. It is learned that about five miles only will be built this spring, from the city limits to a resort called Keller's Pavilion. O. Hammond, of Baltimore, is associated with this enterprise.

The City & Suburban Railway Co. is about to extend its Highlandtown branch to Point Breeze, a distance of two miles. Work will be completed by June 1. Nelson Perin is president.

The City Passenger Railway Co., Oden Bowie, president, will also extend its Canton division one mile, to Tenth street; to be operated by electric motors.

The City & Suburban Railway Co. will also rebuild its Catonsville division, seven miles in length, for electric motors.

The Edmondson Avenue, Catonsville & Ellicott's Mills Company, which is a part of the company recently formed to construct an electric road from Baltimore to Washington, it is understood, contemplates building nine miles of its road west of Baltimore during the summer. George Yakel and Alexander Brown, of Baltimore, are interested.

The Baltimore Traction Co., T. Edward Hambleton, president, has obtained permission to connect its Fremont and Ridgely street lines and extend them to the southwestern city limits, with a possible terminus at Westport.

Work has commenced on the Walbrook, Gwynnook & Powhatan, an electric road four miles long, extending from the terminus of the Walbrook division of the Lake Roland elevated railway system to Powhatan. The road is to be completed by June 1. F. H. Calloway is secretary of the company. Smith & Schwarz, of Baltimore, are also interested.

The Baltimore Traction Co. is completing an extension of one mile to its Arlington division.

The Pikesville, Reisterstown & Emory

Grove Company has been formed to build from the terminus of the Pikesville branch of the Baltimore Traction system to Reisterstown, Glyndon and Emory Grove camp grounds. The distance is ten miles. Geo. R. Webb and John L. Cowan, of Baltimore, are prime movers in the project.

The City Passenger Railway Co. is about to extend its Hall's Springs division to Lauraville, five miles.

All of these projects are backed by responsible parties, who are actually preparing to complete them. They embrace, all told, about eighty miles of electric road.

In addition, two companies have been formed to build electric roads from Baltimore to Washington, the routes being thirty-eight and forty-two miles long.

Possibility of a New York-Baltimore-Washington Electrical Railroad.

Recent deals seem to indicate a change in the original plans for the boulevard and electric railroad between Baltimore and Washington. The Widener-Elkins syndicate, of Philadelphia, which is promoting the enterprise, secured a charter for the line from the Maryland legislature in 1892. This charter, however, did not give sufficient latitude to the company. An unsuccessful attempt was made at the 1894 session of the legislature to so amend the charter as to strike out objectionable and restrictive clauses, giving the company a freer scope. However, at this session a charter was granted to the Baltimore & Columbia Railroad Co. to build a railroad from Washington and Baltimore to the Pennsylvania State line. Stephen Gambrell, one of the incorporators named in the original charter given the Widener-Elkins syndicate, is mentioned as one of the charter members of this corporation. This charter is very elastic in its provisions, permitting the building of either an electric or steam road, with a wide section of territory opened to its ramifications. It now appears that the Widener-Elkins people have secured this charter and will build a line between Baltimore and Washington under its privileges. Some interesting speculation is prompted by such a happening. It is intimated that the company will drop the boulevard feature, and it is suggested that it could also, if desired, avail itself of the privilege to build a steam road instead of an electric road, making three steam roads between the Monumental City and the nation's capital. The authority to build to the Pennsylvania State line, it is ventured, may mean the Maryland link in the great electric railway project between New York and Philadelphia, or, tersely stated, an electrical railroad from Washington to New York.

A Texas Way of Doing It.

The following letter from President William Davis, of the San Antonio & Gulf Shore Railway Co., has some particularly interesting features. This road, which, as readers of the MANUFACTURERS' RECORD are aware, is to extend through one of the best sections of the State, is an example of what a few determined men can accomplish in that country. "No stock is for sale," writes Mr. Davis, and "only twenty stockholders are in the company." The letter is as follows:

SAN ANTONIO & GULF SHORE RAILWAY.

Office of President and General Manager.

SAN ANTONIO, TEXAS, April 16.

Editor Manufacturers' Record:

We have let the contract for the construction of our line to Massey & Co. from this city to Velasco, a distance of about 170 miles. They will furnish all material and labor and construct the road according to our plans and specifications. Our road-bed will be fourteen feet, our maximum grade 1 per cent., our rails 60-pound. We will spend our money judiciously on construction with a view to

cheap operation. We pay Massey & Co. in the first mortgage bonds of the road, they taking the entire issue, \$2,000,000 worth. There are only twenty stockholders in the company and no stock is for sale.

WM. DAVIS.

Very Important, If True.

Failing to make a satisfactory alliance with rail lines east of Chicago, it is announced that the Atchison system has arranged with the Mallory Steamship Line, running from Galveston to New York, to carry transcontinental business in competition with the Southern Pacific.

Railroad Notes.

THE franchises of the United Electric Railway at Nashville have been sold under a decree of the United States Circuit Court to Nat. Baxter, Jr., representing the bondholders, for \$138,500. The sale is subject to \$1,516,000 underlying bonds. The company operates forty-six miles of railway in the city.

THE Alabama railroad commission has recently completed an inspection of the Chattanooga Southern road and pronounces it to be in excellent condition. They highly compliment Receiver Burke's management.

THE Pennsylvania Railroad Co. has opened its new warehouse for perishable freight at Jersey City. It cost \$400,000, while the site, it is said, cost \$1,000,000. It adjoins the big passenger station, and is one of the finest freighthouses in the country, and will be used extensively for Southern business.

THE owners of the Portsmouth (Va.) Street Railway have elected L. R. Watts, president; H. L. Page, vice-president, and John L. Watson, secretary.

JUDGE SIMONTON has decreed the sale of the Columbia & Greenville and Charlotte, Columbia & Augusta roads. No bid will be received for less than \$100,000. The sale is to take place in Columbia, S. C.

THE Florida Southern has ordered three new locomotives for its service from the Brooks Locomotive Works.

J. S. TURNER, formerly master mechanic of the Mexican Central and Mexican International Railways, has been appointed superintendent of motive-power and machinery of the West Virginia Central & Pittsburg, with headquarters at Elkins, W. Va.

THE Stuttgart & Arkansas River Railroad Co. has reorganized and elected the following directors: F. M. Gillett, 5 Wall street, New York; George E. Barstow, Providence, R. I.; J. M. Taylor, Pine Bluff, Ark.; Edward Hall and C. K. Leslie, Stuttgart, Ark.; T. H. Leslie and H. G. Leslie, Gillett, Ark. The officers are: President, F. M. Gillett; vice-president, T. H. Leslie, and general manager, C. K. Leslie.

LUMBERTON, N. C., has voted a subscription of \$20,000 to the capital stock of the Lumberton & Lumber River Railroad, a project designing to connect Lumberton with the Cape Fear & Yadkin Valley Railroad.

THE Union Pacific Railroad, which is in the hands of a receiver, is expected to default its bond interest, due on May 1, on a number of the roads composing the system. The Fort Worth & Denver City Railway is the only Southern line that may be so affected. The Union Pacific & Denver Gulf Railway Co. owns \$5000 of the first mortgage 6 per cent. bonds of the Fort Worth & Denver City, \$160,000 of its 5 per cent. equipment trust bonds and \$218,000 of the first mortgage 5 per cent. bonds of the Pan-Handle Railway, which is included in the Denver & Fort Worth system. All these bonds are secured by a consolidated mortgage.

SEVERAL years ago the Baltimore & Ohio Railroad Co. expended about \$300,000 in

building a great coal pier at Philadelphia, which as yet has not been used. Arrangements looking towards its utilization are believed to be now in progress.

THE Atlantic, Tennessee & Ohio Railroad has accepted a proposition to go into the Richmond Terminal reorganization. The road has forty-seven miles of track, extending from Charlotte to Statesville, N. C., and was leased in 1881 to the Charlotte, Columbia & Augusta Railroad Co. The capital stock is \$400,000. Of this amount \$100,000 is owned by Mecklenburg county and \$60,000 by Iredell county, N. C. The funded debt is \$150,000.

STOCKHOLDERS of the New Orleans & Northwestern Railway Co. at their recent annual meeting elected the following directors: Charles Hyde, Plainfield, N. J.; J. H. Bethune, St. Louis, Mo.; T. E. Morrison, St. Louis, Mo.; L. K. Hyde, Titusville, Pa.; E. S. Drake, Port Gibson, Miss.; C. H. Hammett, Kansas City, Mo.; F. DeL. Hyde, New York, N. Y.; A. H. Foster, Natchez, Miss., and James W. Lambert, Natchez, Miss. Officers were selected as follows: President, Charles Hyde; vice-president, F. DeL. Hyde; first vice-president, T. E. Morrison; second vice-president, J. H. Bethune; secretary, James W. Lambert, and treasurer, J. M. Barkley.

A STATEMENT made by Receiver Alfred Abel, of Waco & Northwestern Railway Co., to the United States Court at Galveston, Texas, estimates that improvements imperative this coming summer will cost \$17,500.

THE Ohio Valley Railway Co. has elected the following directors: S. S. Brown, of Pittsburg, Pa.; Dr. P. G. Kelsey, of Evansville, Ind.; E. R. Robinson and C. S. Fairchilds, of New York; James Montgomery and Arthur Carey, of Louisville, Ky., and Jordan Giles, of Sturgis, Ky.

Real Estate Deals at Baltimore.

Two additional suburban settlements are in prospect for Baltimore. State Senator John Hubner, of Baltimore county, has purchased 120 acres of land at \$200 per acre near Catonsville, about eight or nine miles from Baltimore, and will lay it off into building lots. Boston parties are negotiating to purchase fifty-five acres of land about five miles from the city on the Baltimore & Ohio Railroad for the same purpose. Indications point to increased activity in real estate at Baltimore, especially in suburban property. The really remarkable industrial progress of the city is causing a general awakening throughout the country to the fact that Baltimore is the only large city in the country that has not had a suburban boom, and the indications are that such a boom will come here as elsewhere.

Telephone Patents Still in Force.

Prof. John Trowbridge, of Harvard College, in a letter to Mr. D. A. Tompkins, of Charlotte, N. C., says: "The American Bell telephone still holds patents on the carbon transmitters. The patent on the magnetic receiver or hand telephone has expired. Anyone can use the latter. Satisfactory service, however, cannot be obtained without the use of a transmitter. The hand telephone can be of service for short lines, perhaps two miles. It is not suited, however, without the employment of a transmitter for central station purposes. I do not know of anyone, therefore, who can provide a satisfactory telephone outside the American Bell Company's patents for central station work."

THE business men of Canton, Miss., have organized a board of trade, consisting of the prominent residents of the town. Hon. George Harvey is president; Isidore Gross, vice-president; B. F. Hull, secretary, and L. Foot, treasurer.

FINANCIAL NEWS.

American Bonds in Paris.

France promises to become a good market for American securities. It is possible that a number of selected stocks and bonds will be listed on the Paris Bourse through the efforts of the Credit Lyonnaise, of which Mr. Charles Einsiedler is the New York agent. Mr. Einsiedler, who has just returned from abroad, found the French investment market in good shape. The Credit Lyonnaise has lately placed and is placing considerable quantities of American railroad bonds among its customers in Paris. It has sold only gilt-edged bonds, but can sell them as fast as it can obtain them. The association does not advertise its offerings, and its mere recommendation is sufficient to place them among its own customers. The fact that American railroad bonds are issued only in denominations of \$1000 is the chief bar to their absorption in France. If they were issued in denominations of \$100 France would be found willing to take them in very large amounts. The Credit Lyonnaise, it is claimed, would have no difficulty in placing \$1,000,000 a week of first-class American securities. Here is an excellent field for the sale of good Southern securities which would have the merit of attracting the attention of French capitalists to the South through investments made in them.

New Financial Institutions.

Baltimore, Md.—Harry A. Orrick has secured options on a majority of the stock of the Equitable National Bank at 99 3/4.

Baltimore, Md.—The Clifton Savings Bank has been organized with Albin Seidel, president, and G. W. Bahlke, treasurer. The bank will have branches in various parts of the city.

Baltimore, Md.—Samuel H. Barry, Jr., and others have incorporated the Citizens' Building and Loan Association with \$520,000 capital.

Greenville, S. C.—The Fulton Industrial Aid Association has been incorporated by T. W. Davis, J. W. Lipscomb and R. J. Wilkinson to conduct an insurance business.

Kissimmee, Fla.—The Osceola State Bank has been incorporated with John M. Lee, president; Moses Katz, Elmore D. Beggs, Hamilton Disston and E. Nelson Fell, directors. The capital stock is \$15,000.

Newton, Ala.—Steps are being taken to establish a bank.

Seguin, Texas.—H. Krezdorn and others have chartered the Seguin Building and Loan Association with \$100,000 capital.

Tampa, Fla.—The Exchange National Bank, lately organized, has commenced business with a capital stock of \$100,000.

Waycross, Ga.—The Bank of Waycross is to be opened May 1 with \$50,000 capital. A. M. Knight is proposed for president, and Newton Woodworth for cashier.

Wheeling, W. Va.—The German-American Savings and Loan Association has been formed by William A. Wilson, George Hook and others.

New Bond and Stock Issues.

Baltimore, Md.—The Pikesville, Reisterstown & Emory Grove Railway Co. will issue \$250,000 5 per cent. 40-year bonds on the road, which is to be ten and a-half miles long. Middendorf, Oliver & Co., of Baltimore, are the financial agents.

Baltimore, Md.—The Baltimore Belt Railroad Co. has executed a second mortgage to cover an issue of \$2,500,000 of 40-year 4 1/2 per cent. \$1000 bonds. The Mercantile Trust & Deposit Co. is trustee under the mortgage.

Baltimore, Md.—Mayor F. C. Latrobe will receive bids until May 1 for \$2,331,100 of city securities bearing interest at from 3 to 6 per cent., and coming due in from

six to forty-six years. The securities are now held in the general sinking fund.

Barnesville, Ga.—The city has sold \$20,000 worth of 6 per cent. bonds to Chicago investors.

Davis, W. Va.—The town council has, owing to opposition manifested, rescinded its call for an election to vote on an issuance of \$10,000 of bonds.

Forsyth, Ga.—The town will vote on the question of issuing \$25,000 in bonds for water-works and electric-light systems.

Jackson, Miss.—The city has sold \$10,000 in bonds for erecting a school.

Jacksonville, Fla.—The city council has decided to make the proposed issue of \$1,000,000 in 5 per cent. bonds payable in gold. An offer of 97 1/2 by Coler & Co., of New York, has been accepted for the entire issue.

Louisville, Ky.—The Louisville Gas Co. will issue \$600,000 of additional stock, making the capital stock outstanding \$4,000,000. The funds are to liquidate floating indebtedness.

Tallahassee, Fla.—The issuance of bonds is proposed.

Interest and Dividends.

The St. Charles Street Railroad Co. of New Orleans has declared a quarterly dividend of 1 1/2 per cent.

The Sibley Manufacturing Co., of Augusta, Ga., has declared a dividend of \$3.00 per share.

The Jacksonville (Fla.) Loan & Improvement Co. has declared a dividend of \$4.00 per share on its stock.

The Kincaid Manufacturing Co., of Griffin, Ga., has declared a dividend of 10 per cent.

Receiver J. R. Barber, of the First National Bank of Cedartown, Ga., will pay a dividend of 30 per cent. to the creditors of that institution.

Failures and Suspensions.

W. F. Jones, of Kenton, Tenn., has made an assignment. Liabilities are estimated at \$23,000.

M. Lotz & Sons, plumbers at Baltimore, have made an assignment to W. J. Clendenin. Assets are estimated at \$6000.

W. H. Thomas & Son, wholesale liquor dealers at Louisville, have assigned. The liabilities are estimated at \$600,000 and assets more than that amount.

T. B. Rippy, distiller, Lawrenceburg, Ky., is reported as making an assignment to the Fidelity Trust & Safe Vault Co. of Louisville; liabilities \$550,000, with assets largely in excess.

Financial Notes.

THE Teutonia Savings Bank and the Mutual Building and Loan Association have secured a new office building at New Orleans and are now occupying it.

CLAPP & CO., the well-known New York banking-house, have recently issued a book which is of especial interest to all having money to invest, as well as business men generally. It gives an accurate list of market quotations, principal grain crops of the world and home and foreign consumption, and statistics on immigration, cotton production, price of silver, etc. The illustrations form a feature of the work. It contains thirty-two pictures of buildings occupied by financial bodies.

J. M. MCKNIGHT has been selected as vice-president of the German National Bank at Louisville, Ky.

THE people of Ybor City, Fla., which is practically a part of Tampa, seem determined to move the entire cigar-manufacturing business of Key West bodily over to Ybor. Quite a number of Key West cigar manufacturers have already determined to move, and one factory has just been secured by a bonus reported at \$70,000. While this looks like a large amount, it is stated that the factory will employ about 500 hands.

SOUTHERN TEXTILE INTERESTS.

[A complete record of new textile enterprises in the South will be found in the Construction Department, on pages 214 and 215.]

SISAL HEMP IN FLORIDA.

An Important Industry for the South—
A Syndicate Organized to De-
velop this Business.

[Special Cor. MANUFACTURERS' RECORD.]

FORT PIERCE, FLA., April 22.

Much has been said and written during the past two years concerning the present development and the great possibilities of the sisal-hemp industry in Florida, especially upon the east coast, and the MANUFACTURERS' RECORD has repeatedly called attention to the subject. It is, therefore, extremely gratifying to know that a practical step toward the establishment of sisal culture in Florida, both as a permanent and profit-yielding business, is to be undertaken.

With the exception of the plantation at New River, in the Bay Biscayne country, this is, your correspondent thinks, the first step in the practical development of what bids fair to be the greatest industry on the east coast, if not in all Florida.

Mr. C. W. Parsons, who has been studying the sisal-hemp plant in Florida for the past six years, and who has prosecuted a system of thorough investigation into the possibilities of the industry, has just organized a syndicate of capitalists for raising sisal hemp and marketing it for profits. From advance reports of the plans of this company as furnished to the Jacksonville Citizen I am able to gather the following points:

SYNDICATE ORGANIZATION.

The organization at present contains only seven men, most of them residents of Chicago, New York and the East, and some of them are already engaged in the manufacture of cordage, etc. They have already put up a large amount of money for the preliminary expenses, and have pledged \$300,000 for the enterprise, at which figures the subscribers will capitalize the stock company to be organized within the next two or three months.

The syndicate has just purchased a tract of about 5000 acres of land lying a little southwest of the St. Lucie river in the extreme southern part of Brevard county, of which 2000 acres will be cleared and placed under cultivation at the earliest possible date, and as soon as the organization of the company is perfected all the necessary buildings will be put up on the property and a first-class decorticating plant will be established. Later on a tramway will be constructed either to the St. Lucie river or to the tracks of the Jacksonville, St. Augustine & Indian River Railway for the cheap and easy transportation of the hemp.

The plantations will be set out with the sisal plants upon an average of about 700 to the acre, in rows about eight feet apart and with a space about eight feet between the plants in each row. At intervals of fifty or sixty feet cart roads sixteen feet wide will cross the plantations for convenience in gathering and hauling the leaves to the mill.

THE YUCATAN PLANT.

In Yucatan it is not uncommon to find sisal plants cultivated as high as 1200 or 1500 to the acre, but the plants attain a much larger size on the Florida east coast, and in consequence greater space has to be allowed for them to grow in.

There is considerable room for improvement in all the fibre machines now in use, but experimentation has succeeded in producing two which are particularly adapted to the leaves of the sisal plant, being far superior to that employed by Mr. Charles Richards Dodge, of the United States Department of Agriculture, in his fibre experiments on the lower east coast of Florida.

These improved decorticating machines are manufactured by J. C. Todd, of Paterson, N. J., and by T. Albee Smith, of Baltimore.

THE FLORIDA FIBRE OF GOOD QUALITY.

In recent years the price of Yucatan sisal hemp has averaged about \$100 per ton, or five cents per pound. At present, however, the price is somewhat depressed, the average price being about four cents per pound.

It is everywhere admitted that the fibre of the Florida east coast is finer, stronger, more durable and better in every way than the Yucatan product, and the manufacturers of hemp products in general agree that in open market it will, undoubtedly, bring at least two cents more per pound than the Yucatan. So Mr. Parsons's syndicate confidently expects fully six cents per pound for its sisal product when, three years or so from now, it shall market its first crop. The waste, or "short fibre," is also marketable, bringing from two to three cents per pound.

Of the success of the enterprise there is not the slightest doubt, the promoters of it looking with confidence for profits of at least \$100 per acre after the plants begin to yield, at the age of three and a-half or four years. Of this feature of the industry Mr. Parsons says: "As is well known, the sisal plant, when cultivated for the market, is never allowed to come to maturity. It would 'pole' and blossom at the age of seven years and then die. But it is cut down every year, so that all its strength goes into its leaves, and they may be cut for fibre as soon as the plant is in its fourth year. When the plantation is of that age the crop is continuous, and large quantities of the leaves can be cut every day in the year.

NO INSECT ENEMIES.

"The plant has no enemies. There is no animal or vegetable parasite that preys upon it. The land requires no fertilizing, and a crop is always assured under all conditions of weather below the line of injurious frosts. The sisal plant will stand droughts and inundations, but neither of these conditions is ever likely to occur on the lower east coast. The advantages which this section has over Yucatan and the Bahamas are as follows:

"Better and cheaper lands, larger and better plants, better and cheaper transportation, no frosts, floods or droughts, more intelligent and cheaper labor. The improved decorticating machines referred to have a capacity of 60,000 green leaves per day, which represents an average fibre product of about two tons. They cost about \$1800 to \$2000 each, and in all probability our company will put in three or four of them—at any rate that number of the best machines made at the time when we shall need them—not earlier than 1897. If the conditions warrant it at that time we shall be prepared to handle the leaves of any other plantations which may have been developed in the interim. Some of the more sanguine in our syndicate look for a profit of \$200 per acre at the outset."

In experiments by Mr. Parsons with five different lots of sisal leaves it was noticed that the average weight per leaf in the first four lots was only about one and a-half pounds, the highest percentage of fibre yield being only 4.08. These leaves were from two to three weeks old when treated in the machine, and had, of course, lost considerable in weight.

LEAVES WEIGHING THREE POUNDS.

On the east coast one frequently encounters sisal leaves weighing from two to two and a-half pounds when cut, and a few days ago Mr. George W. Gill, of Washington, D. C., cut one at random in a garden at Titusville which three days

afterward in Jacksonville weighed three pounds. The most striking features of the Florida plant are the enormous size and weight of the leaves and their immense yield of fibre.

There is annually imported into the United States over \$50,000,000 worth of all kinds of fibres, of which \$7,000,000 or \$8,000,000 worth is leaf fibres. These latter figures represent probably about 90,000 tons of leaf fibres imported, every pound of which could easily be produced here in Florida and be sold at a big profit by the growers. The indications are also that during the national administration succeeding the present one a protective duty will be placed upon sisal hemp, thus giving American growers an opportunity to develop their industry.

ENGLISH CAPITAL IN SISAL.

English capital is proverbially quick to discover and improve every opportunity for profitable investment, and in this connection it is a very significant fact that the Right Hon. Joseph Chamberlain, of England, has in recent years purchased and placed under successful cultivation in sisal hemp over 5000 acres of land in the Bahamas, most of it upon the Island of Andros, the largest of the group, and he and his sons are now preparing to take up and cultivate 5000 acres more.

The Florida east coast is superior to any portion of the Bahamas for the cultivation of sisal hemp, and its transportation and other marketing facilities far superior to those of the colonists. The prediction of your correspondent is, therefore, that within the next fifteen years we will see Florida supplying not only the United States with all its sisal hemp at a considerably increased annual consumption, but also exporting the product to foreign countries.

Mr. Parsons says that there is a strong probability that, after the success of growing and marketing hemp upon the east coast shall have been demonstrated, his company will erect and operate one or more cordage factories on the Indian river, where the product of the sisal plantations will be worked up into twines, ropes and bagging of commerce. This will make a great saving in transportation charges, just as the manufacture of cotton fabrics near the plantations in the South is destined to cheapen this class of goods and to make this section a strong competitor of the New England and Middle States.

THE COTTON CROP.

Over 7,000,000 Bales Present Crop
Marketed—The Week's Movement
of 14,142 Bales Over Same
Week in 1893 and 9116
Bales Over 1892.

The New Orleans Cotton Exchange statement shows that the 7,000,000 mark for the present cotton crop was passed during last week. The amount of this year's crop in sight is 313,000 more than the entire crop of last year.

For the past week the movement was 14,142 bales, or nearly 33 per cent., over the seven days ending April 20 last year, and 9416 bales, or nearly 20 per cent., over the corresponding seven days year before last.

The movement since September 1 shows receipts at all United States ports of 5,614,052, against 4,681,100 last year and 6,657,436 the year before; overland across the Mississippi, Ohio and Potomac rivers to Northern mills and Canada, 703,758, against 788,108 and 1,155,103; interior stocks in excess of those held at the close of the commercial year, 123,335, against 185,893 and 255,326; Southern mill takings, 571,825, against 553,684 and 500,779.

Foreign exports for the week have been 63,294, against 63,549 last year, making the total thus far for the season 4,622,694, against 3,633,246 last year, or an increase of 989,448.

Northern mill takings for the past seven days show a decrease of 330 as compared with the corresponding period last year, and the total takings since September 1 have decreased 299,198. The total takings of American mills North and South and Canada thus far for the season have been 1,830,369, against 2,114,347 last year; these include 1,234,629 by Northern spinners, against 1,533,827.

COTTON IN SIGHT.

(Including movement in three years from September 1 to April 20, inclusive.)

	This Year.	Last Year.	Year Before.
Receipts at ports since September 1.....	5,614,052	4,681,100	6,657,436
Overland to mills and Canada—net.....	703,758	788,108	1,155,103
Interior stocks in excess of Sept. 1.....	123,335	185,893	255,326
Southern mills' takings, less consumed at Southern ports included in port receipts.....	571,825	553,684	500,779
Total in sight.....	7,012,970	6,208,785	8,568,644
Per ct. of crop in sight	92.66	94.83	94.83
Brought into sight after April 20.....	491,580	466,735	466,735
Total crop.....	6,700,395	9,035,379	9,035,379

*Based on twenty-four leading interior towns reported to the exchanges, and also stocks at Houston, Texas, Griffin, West Point and Athens, Ga., and Meridian, Miss.

MOVEMENT AFTER APRIL 20 LAST YEAR AND YEAR BEFORE.

	Last Year.	Year Before.
Port receipts.....	467,292	480,464
Overland to mills direct.....	124,638	98,457
Southern mills' takings from interior direct.....	146,143	143,140
Total.....	677,473	722,061
Less interior towns' stocks from this year's crop in sight on April 20.....	185,893	255,326
Amount brought into sight after April 20.....	491,580	466,735
Per cent. of crop brought into sight after April 20.....	7.34	5.17

Above figures show movement to Northern mills according to system of counting all transit cotton between the ports as having gone to the mills.

SUPPLY AND DISTRIBUTION OF COTTON.

	This Year	Last Year
Supply:		
Amount brought into sight during 232 days of season..	7,012,970	6,208,785
Stocks at ports and 29 principal interior towns left over from last crop.....	309,956	532,951
Total supply dur'g 232 days	7,322,926	6,741,736
Distribution:		
Exports to Great Britain.....	2,609,561	1,907,706
Exports to France.....	563,059	496,803
Exports to Continent, etc....	1,440,393	1,228,647
Exports to channel.....	9,681
Total exports 232 days of season.....	4,622,694	3,633,246
Amer. spinners' takings:		
North.....	1,234,629	1,533,827
South.....	595,740	580,520
Total domestic spinners' takings.....	1,830,369	2,114,347
Burned.....	886	46
Stock at U. S. ports April 20..	678,317	694,474
Stocks at interior towns.....	190,660	299,623
Total American stocks.....	868,977	994,097
Total distribution.....	7,322,926	6,741,736

Net overland for this week this year....	13,377
Net overland for this week last year....	13,495
Net overland for this week year before last.....	15,776
Net overland thus far for month this year.....	29,852
Net overland thus far for month last year.....	31,077
Net overland thus far for month year before last.....	43,419
Brought into sight this week.....	57,015
Brought into sight same seven days last year.....	42,873
Brought into sight same seven days year before last.....	47,599
Brought into sight 20 days of April this year.....	161,031
Brought into sight 20 days of April last year.....	138,640
Brought into sight 20 days of April year before last.....	174,355
Northern spinners' takings this week..	19,809
Northern spinners' takings same seven days last year.....	20,129
Increase in amount of crop brought into sight to date over last year.....	804,185
Decrease in amount of crop brought into sight to date under year before last.....	1,555,574
Increase in supply since September 1 over last year.....	581,190
Increase in foreign exports since September 1 last year.....	989,448

Decrease in American spinners' takings since September 1 under last year.... 283,978
Decrease in American stocks under last year..... 125,120

Northern and Southern Yarns.

A writer in the Charlotte Observer says: "The Boston Journal of Commerce published an editorial on the subject of Northern vs. Southern yarns. The position is taken that Southern yarns sell in the markets materially cheaper than Northern yarns. It is claimed that the difference is emphasized in depressed times when yarn is hard to sell. The reasons given for this difference are as follows:

"1. 'The yarn mills of New England have accordingly (on account of dull trade) restricted production more or less to correspond with the exceptional condition of affairs, while most of the Southern yarn mills, even during the dullness of last summer, ran without much stop and accumulated stocks more or less in anticipation of a volume of trade that has not yet come.'

"2. 'With all fairness and without prejudice, it must be said that at present the yarn mills of New England, as a rule, turn out a more finely-finished and uniform product made from higher-priced and more uniform cotton.'

"The first of the reasons given is correct. Southern mills, as a rule, have less capital to put into stock than Northern mills do, and yet the average Southern millman seems determined to run if anybody can possibly be found who will carry his product on any terms. The brokers most willing to undertake to carry Southern yarns and advance money on them are in many cases the equivalent of purchasing agents for Northern weave mills, and they are under as much obligation to serve the Northern weave mill as the Southern yarn mill. In order to close a trade it is most natural for the broker who has advanced money to insist on such a price for yarn as will satisfy his Northern customer, who is in a more independent position.

"As to the quality of the yarns, there is good and bad made North and South alike.

"Those mills that do good work and are independently situated in the South get just as good prices for yarns as Northern mills do.

"I believe that the statement made by the Journal that the quality of cotton used at the North is better than at the South is so far incorrect that the reverse is true. Southern mills use uncompressed cotton, which is an advantage. In a city like Charlotte the buyer has the selection of his own cotton from the compress platforms before the cotton is compressed, and may buy 100 bales out of a lot of 2000. The Northern mill buys a lot of cotton of an average grade and must take cotton furnished if the grade does average what was bought.

"In the Journal's quotations there are differences made in Southern and Northern yarn that do not exist in fact. When Southern millmen come to know enough to shut down when their product cannot be sold, and, above all things, not to consign stock to yarn markets and purchasing agents of Northern weave mills, then Southern yarns will average just as good prices as those made at the North. The yarns from some Southern mills now bring a premium in the Northern markets, because of the good stock in them and the quality of the work on them, and the time should come when this should be the rule rather than the exception."

A New Hosiery Mill.

Mr. John Meier, for some time superintendent of a hosiery mill at Charlotte, N. C., has entered into agreements for the establishment of a similar plant at Valdese, N. C. Valdese is in Burke county, at a point where a Waldensian colony was recently located, and Mr. Meier, in view of

certain concessions, will employ only Waldensians in the mill for the first five years of its operation.

Spindles and Looms in England.

The new edition of Worrall's Cotton Spinners and Manufacturers' Directory gives the total number of cotton spindles in Lancashire, Cheshire, Yorkshire and Derbyshire, England, as 42,970,528. Mr. Ellison's most recent estimate fixes the whole number in the United Kingdom at 43,500,000. The following figures, taken from Mr. Worrall's detailed table, show the number of spindles in each principal district:

Spindles.	
Oldham district, including Middleton, Royton, Shaw, etc.....	11,526,317
Bolton district.....	4,860,812
Manchester and Salford district.....	2,708,512
Preston district.....	2,021,001
Ashton district.....	2,013,700
Stockport district.....	1,980,388
Rochdale district.....	1,914,008
Blackburn district.....	1,435,981
Leigh district.....	1,400,546
Mossley district.....	1,333,390
Glossop district.....	1,199,134
Stalybridge district.....	1,141,852
Heywood district.....	884,737
Bury district.....	792,708
Burnley district.....	735,935
Other districts.....	7,022,327
Total.....	42,970,528

The total number of looms engaged in the cotton manufacture in the four counties is given by Mr. Worrall as 602,627. A year ago the number was estimated by the same authority at 615,719. It would appear, therefore, that there has been a diminution within twelve months of 13,092 looms. Here again no account is taken of the cotton machinery in Scotland or Ireland, nor of that in the few isolated cotton mills in England outside the four counties already mentioned. The relative importance of the principal weaving centres may be inferred from the following list of the number of looms in some of the principal manufacturing districts:

Looms.	
Blackburn district.....	72,179
Burnley district.....	71,198
Preston district.....	55,723
Nelson and Barmouthford.....	47,477
Manchester and Salford district.....	26,581
Accrington district.....	26,503
Darwen district.....	24,577
Rochdale district.....	23,645
Bury district.....	21,490
Bolton district.....	19,829
Oldham district.....	19,761
Glossop district.....	17,681
Colne district.....	15,763
Todmorden district.....	14,640
Chorley district.....	13,330
Bacup district.....	12,907
Other districts.....	139,913
Total.....	602,627

One Way of Producing Cotton.

It is a fact generally acknowledged that much of the profit from cotton sales goes to the manufacturers and the merchants who sell the finished material. If they could make no profit they would not be in the business. If the cotton planter turns the raw material into yarn or fabric in his own mill he is in a position to realize much more benefit financially than by simply raising and picking the staple and trusting to the manipulations of cotton future speculators—too often to his sorrow—to obtain even a fraction of a cent per pound profit.

D. L. & J. A. Lewis, of Sycamore, Ala., are conducting what might be called an object-lesson, which is free to Southern investors. Thus far it has been successful and bids fair to be more so in the future. They are manufacturers and merchants as well as planters. They own a large plantation which is cultivated by tenants. They supply the tenants with animals, implements and everything needed to raise crops, also provisions, clothing and the necessities of life. The cotton is all ginned at the Lewis ginnery, and the corn ground at the Lewis grist mill. They have just completed a yarn mill of 5376 spindles which, it is claimed, has no superior in the South or New England. This mill takes every pound of cotton on the plantation, and employs 115 operatives. The MANUFACTURERS' RECORD has received a sample of the yarn produced from it, which is pronounced by experts in Baltimore to be of No. 1 quality

and equal to the best sold in the Philadelphia market.

The operatives work twelve hours five days in the week and ten hours Saturdays. The store receives 85 per cent. of the earnings of the operatives and farm hands. By the system employed by the Lewis Bros. they secure the profits from the store sales; they save the expense of ginning and spinning the yarn and the hauling and railroad freight on the raw material to market; they save the usual charges for grinding corn, also the cotton factor's commission for selling to the manufacturer, while the mills give employment to so much more home labor, which enables the owners to make the store self-sustaining and profitable. These are but a few of the benefits which will be appreciated by all interested in cotton production.

Notes.

MESSRS. ATWOOD VIOLETT & CO., of New Orleans, have issued a special crop bulletin of sixteen pages, giving the results of an elaborate investigation made as to the amount of cotton yet unshipped from plantations and the outlook for the acreage of the coming crop. This elaborate report is based on information received in reply to 3000 letters of inquiry. Under each State the replies are given by counties, and the general summary of the whole is figured up, showing the results of all the answers.

THE Amoskeag Corporation, of Manchester, N. H., one of the greatest cotton-manufacturing concerns of the country, which employs when in full operation 7500 hands, has decided to shut down the part of its mill devoted to making coarse goods. While the reason for this is given as the decrease in the demand, it is doubtless largely due to the fact that Southern cotton mills are monopolizing the manufacture of coarse goods.

THE MANUFACTURERS' RECORD has often commented upon the fact that, notwithstanding the rapid expansion of the cotton-manufacturing interests of the South, there is no plant in all that section for building textile machinery. It may come about that this will be changed, as the D. A. Tompkins Co., of Charlotte, has completed the equipment of a shop for doing general cotton-mill repairs. With the energy that has marked all the operations of this company, the MANUFACTURERS' RECORD predicts that this will gradually be extended until Charlotte is able to boast of an extensive textile-machinery industry. This repair shop will make a specialty of cutting gear for all cotton-mill machinery, cover top rolls and general repair work.

MR. J. HOWARD NICHOLS, treasurer of the Dwight Manufacturing Co., Chicopee, Mass., is now in the South investigating with a view to selecting a site for the mill which is to be built by this company, as recently announced in the MANUFACTURERS' RECORD. The Dwight Company has a capital stock of \$1,200,000, and operates 130,000 spindles and 3436 looms. At the last session of the Massachusetts legislature permission was given to the company to increase its capital stock to \$1,800,000, in order to build a large mill in the South. While in Raleigh last week Mr. Nichols is reported to have said that it is a matter of necessity for some of the large print mills to be moved from Massachusetts to the South.

THE annual meeting of the stockholders of the Graniteville Manufacturing Co. was held at Graniteville, S. C., on the 19th inst. Mr. H. H. Hickman, of Augusta, Ga., president of the company, read his report for the year. It was shown that the plant has been in operation during the entire year, notwithstanding the business depression, and a full force of hands has been kept employed without reducing wages. The net earnings for the year were \$84,934.37, from which a dividend of

10 per cent. has been declared, \$3653.23 expended for new machinery, etc., leaving to the credit of profit and loss \$18,939.71. It is the president's desire to put in \$40,000 worth of new machinery this year, and he will endeavor to so manage the plant that this will be accomplished.

THE Cordele (Ga.) Manufacturing Co.'s cotton mill will resume operations at once, a number of orders having recently been received to warrant this move. This company's plant has an equipment of 3600 spindles, and in about a week all will be running with a full force of operatives. Mr. J. F. Hanson, of Macon, is president.

THE financial difficulties of the Leaks-ville (N. C.) Woolen Mills have been so arranged that it is said operations will shortly resume under the management of Mr. Hiram P. Foard.

MR. J. S. WYNNE, secretary and treasurer of the Raleigh (N. C.) Cotton Mills, in a letter published in the News-Observer, of Raleigh, during the week, advocates the building of another cotton mill, and proposes the organization of a \$100,000 stock company for the purpose. The monthly instalment plan is suggested.

MESSRS. MORRISON, GAITHER & CO., whose cotton mill at Eagle Mills, N. C., was lately burned, write the MANUFACTURERS' RECORD that they will not rebuild.

THE Aurora Cotton Mills, at Burlington, N. C., intends to enlarge its buildings very shortly. Arrangements are now being made for an extension of 292 feet. Mr. Lawrence S. Holt is proprietor of the plant.

THE Abbeville (S. C.) Cotton Mill Co., which was incorporated last month, is preparing to commence work on its cotton factory. J. F. Lyon, W. J. Smith, R. M. Hill and others are interested.

IT is said that the directors of the Sibley Manufacturing Co., of Augusta, Ga., are now studying the matter of adding to the mill's machinery. The present buildings have sufficient room for 8000 more spindles and 250 looms, and it is possible that this machinery may be added during the year.

Handling Molasses in Tanks and Tank Cars.

MR. T. R. GRUMAN, of Gretna, La., is establishing the Gretna Molasses Tankage Yards, which will cover an acre and a-half of ground. Mr. Gruman's plan involves the purchase of molasses at the various sugar plantations, pumping it into tank cars and the running of these cars over several railroad lines to his yards, where it is pumped direct from the cars into barrels by a high-pressure pump. These barrels can be loaded on steamships lying at the wharf in front of the Southern Pacific warehouse. Everything is planned in such a way as to effect the greatest saving of time and labor. There are now nine large tanks with the capacity of holding 600 barrels, and Mr. Gruman will soon have from twenty-five to thirty tanks. Every tank has connection with the high-pressure engine by means of a large iron pipe which runs from the engine to the wharf, where is located a tank with two large faucets. Under these faucets two barrels are placed and are, it is said, filled in a minute.

A Bright Future for Dallas.

A correspondent at Dallas, Texas, writes as follows:

"There is not a respectable house in town for rent, and not a store in a good location. The streets from morning to night are like beehives. Real estate is once more coming up in price, and the despised lots of yesterday are selling for thousands of dollars today. Four new railroads, opening of the Trinity river for navigation for 600 miles to the gulf, the building of an ice plant and brewery costing \$750,000 and the construction of 500 new residences are the certainties of 1894."

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Markets for Cottonseed Products.

NEW YORK, April 24.

Prices of cottonseed oils have advanced another cent since our last report. Prime crude is now bringing 30 cents in barrels here and 25 cents loose at the South. Prime summer yellow oil is quoted at 34 cents barreled here and 30 cents loose at the South. It seems that these prices, however, are being paid only for oils suitable for the manufacture of compound lard, other grades being rather neglected. In fact, the market lacks breadth; there is at this moment only one important buyer in the market willing to pay the advance. Domestic buyers of cottonseed oils for manufacturing purposes are holding off, either in anticipation of lower prices or because their wants are small and not urgent. As regards this particular class of trade, it rather looks as if some buyers, having held off a little too long, may have to come into the market at present prices, since tallow, too, is scarce and very firm at 5 cents per pound. The compound lard business is only fair, the interest in lard centering on the apparently oversold options. There is no improvement in the export demand for oil. The Rotterdam market is still insensible to all outside influences. Even the apprehension of an increase in German duties on importations of American cottonseed oil, which might have brought buyers for the Rotterdam stocks, because immediately available, does not appear to have roused the spirit of that market. The German Reichstag has now adjourned, and the discussion of tariff measures has been postponed till autumn at the earliest. The following prices are for barreled oils on the spot: Prime crude, 30 cents; off crude, 27 to 28 cents; prime summer yellow, 34 cents; off summer yellow, 32½ to 33 cents; prime summer white, 37 cents; prime winter yellow, 37½ cents; cottonseed soap stock, 1½ cents per pound; cottonseed meal, \$21.00 to \$23.00 per ton ex dock here. ELBERT & GARDNER.

NEW ORLEANS, April 23.

The New Orleans cottonseed-product market for the past week has been quiet and prices firm, with the general tone indicating a better feeling in oil. However, the lard market this morning is lower, and advices from New York of Saturday are to the effect that we will see a lower market this week. The West seems to be pretty well supplied, and the anxiety in that direction seems at this writing to have disappeared. There is a scarcity of strictly prime crude oil at present, as the seed now being crushed by the few mills now in operation does not make oil that could be classed otherwise than "prime of the season;" consequently, the loss in refined is heavier and the quality of the refined is not so good as in the earlier part of the season. Our market is bare of refined oils just now, with the exception of the holdings of the Union Oil Co., which are quite large. As its tank steamer, which is expected to take 25,000 barrels, will arrive here in the next day or two, this should somewhat relieve the home market. We quote the market as follows: Prime meal jobbing at depot in carload lots, \$20.00 per ton of 2000 pounds; cake and meal per ton of 2240 pounds for export, \$21.75 to \$22.00 bid and \$22.25 to \$22.50 asked by the mill; prime crude oil loose here, 25 to 26 cents; Texas, 24 to 24½ cents; foots, 1½ to 1¾ cents; soap stock, 1½ to 1¾ cents; linters—A, 3½ to 3¾ cents; B, 3 to 3½ cents; C, 2½ to 2¾ cents, according to style and staple.

JAS. RAINEY & CO.

ROTTERDAM, April 16.

The market for refined cottonseed oil has been again quiet during the past week, but the tendency of the market is exceedingly better, and it is more than likely that in a short time higher prices will be obtainable. America is cabling much higher prices for lard and for other grease articles, and the prices of cottonseed oil are so low that an advance in prices may safely be expected. Prices are already somewhat better on this side, and although it is still difficult to sell large quantities of oil (because the butterine manufacturer don't want much oil, a consequence of the extraordinary mild or rather warm weather), it is also impossible now to buy oil at the low prices for which oil has been sold some weeks ago. The American Cotton Oil Co. is now quoting its brands "Union" and "Aldige" 29 guilders per 100 kilos, ex warehouse, but brokers don't think that the company should be inclined to accept lower counter offers. Other good brands are obtainable at 28 to 29 guilders, but it is impossible to buy oil below 27 guilders at this moment. There has been some export demand from Germany and from England, but the orders were somewhat too low, and only a few hundred barrels have been sold. We may expect a good export demand, because Germany and England did not buy still much oil, and at this moment these countries can certainly buy oil cheaper in Holland than in America. Our stock of 35,000 barrels is important, but, as stated already, the larger part of this stock is already in hands of the butter-makers, and is not in the market, for it very seldom happens that a butter-maker sells his materials. The obtainable stock is certainly not larger than about 12,000 barrels. The arrivals of oil are not very important, so on the first active demand from the domestic trade or from Germany or England, the prices must go up, as it seems that prices in America are already higher than in our country. The outlook for this article is considerably better than it has been, and I don't think that it is imprudent to say that oil will soon be salable at 30 guilders per 100 kilos.

G. W. SANCHES.

Cottonseed-Oil Notes.

THE stockholders of the Houston Oil Refining & Manufacturing Co., of Houston, Texas, held their annual meeting in that city last week. The following board of directors was elected for the ensuing year: W. M. Read, E. W. Sewall, W. B. Chew, O. L. Cochran, W. H. Palmer, I. H. Baker, Dr. J. R. Stuart, William Thacher and H. Schumacher. The newly-elected board met and held its election, which resulted as follows: W. M. Read, president; O. L. Cochran, vice-president; W. H. Palmer, treasurer.

THE Yoakum Cotton Oil Mill, at Yoakum, Texas, previously reported, has increased its capital stock, and work on the buildings will be finished and machinery placed ready for next season's operations.

THE steamship Cilurnum, which sailed last week from Galveston, Texas, for Rotterdam via New Orleans, took as cargo 4140 sacks of cottonseed meal, valued at \$4700; also 32,000 bushels of wheat, valued at \$18,080.

THE entire plant of the Crown Linseed Oil Works, of the National Linseed Oil Co., at St. Louis, was destroyed by fire on the 20th inst. The works have been closed nearly ever since they were bought by the linseed-oil company, but the loss on the machinery and building will be \$400,000. It was about three-quarters insured.

THE steamship Parkgate, which sailed from Velasco, Texas, on Sunday last, had among her cargo 1000 casks of cottonseed oil, 4200 sacks of oilcake and 48,120 sacks of cottonseed meal.

PHOSPHATES.

New Phosphate Discoveries in Tennessee.

What is believed to be a very important phosphate discovery is reported from near Cleveland, Tenn. Mr. Thos. L. Cate, vice-president of the Chattanooga National Bank, and others own a large tract of land near Cleveland on which are extensive beds of what is thought to be phosphate similar to that lately found in Hickman and other counties in Tennessee. Investigations are now being made.

Phosphate Markets.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, April 26.

In the local phosphate market the volume of business is still light, and manufacturers are not purchasing extensively. The market is steady, and at points of production there is considerable business in progress, as well as activity in development of phosphate territory. The arrivals reported this week are the schooners Lida J. Lewis, with 800 tons, and the Susan B. Ray, with 600 tons, both from Ashley river, S. C. The charters reported are the schooners Emma C. Middleton, Ashley river to Baltimore, and the S. E. Palmer, Charlotte Harbor to Baltimore. The New York phosphate charters reported yesterday were a British steamship of 1135 tons from Tampa to Stettin at 19½, and a schooner of 689 tons, Coosaw to Elizabethport, at \$1.80, and one of 1173 tons, Charlotte Harbor to Baltimore, at \$1.80. The general market is quoted as follows: South Carolina rock, \$4 25 to \$4 50 for crude; \$5.00 to \$5.25 for hot-air-dried, and \$6.50 for ground rock, all f. o. b. Charleston. Florida rock is quoted \$4 00 to \$4 25 for 60 per cent. river pebble, \$4 50 to \$4 75 for 65 per cent. and \$5.00 for 70 per cent., all f. o. b. Charlotte Harbor or Tampa.

FERTILIZER INGREDIENTS

During the current month there has been a large business in tankage, hoof-meal and concentrated, aggregating 10,000 to 12,000 tons, for delivery on contract the next six to twelve months on the basis of \$1.90 to \$1.95 per unit f. o. b. Chicago for concentrated and hoof-meal, and \$16.00 to \$17.00 for 9 and 20 tankage. The demand for prompt shipments has also been very strong, and all spot stocks have been taken freely on the basis of prices quoted below. Nitrate of soda is firm and higher.

The following table represents the prices current at this date:

Sulphate of ammonia.....	\$3 25@	\$3 50
Nitrate of soda.....	2 45@	2 50
Hoof meal.....	2 25@	—
Blood.....	2 30@	2 35
Azotine (beef).....	2 35@	2 40
Azotine (pork).....	2 45@	2 50
Tankage (concentrated).....	2 25@	—
Tankage (9 and 20).....	\$2 and 10 cts.	—
Tankage (7 and 30).....	19 00@	20 00
Fish (dry).....	nominal	25 00@ 26 50
Fish (acid).....	18 00@	20 00

CHARLESTON, S. C., April 24.

The demand for phosphate rock continues very good, and the market remains steady and little changed from the last week. The local manufacturers are buying only small lots to keep up their stock. Prices quoted are about \$4 50 crude, \$5.00 to \$5.25 hot-air-dried, \$7.50 ground rock, all f. o. b. Charleston. The coastwise shipments for the week were: Per schooners Rillie S. Derby, 650 tons, for Mantua creek, N. J.; Bertha F. Walker, 800 tons, for Philadelphia; W. W. Converse, 1000 tons, for Weymouth; Chas. Schmidt, 800 tons, Baltimore; British steamship Endsleigh, 3000 tons, for France. In port and loading is the Luella Woods, 850 tons, for Baltimore. The shipments since September 1, 1893, are 76,423 tons, against 69,321 tons for same date last year.

Phosphate and Fertilizer Notes.

NIXON BROS., of Phoenix, Fla., have opened up another phosphate mine and are working a large force. The rock is said to

be of very high grade. Other large mines will commence operations at that point in the near future.

THE Ocala & Blue River Phosphate Co., at Luraville, Fla., is running on full time, giving steady employment to 150 men. This company, it is reported, ships daily 160 tons of rock. Eight more log-washers, with a quantity of other machinery, will be placed in the near future, making the plant one of the most extensive in the State. The supply of rock on the company's territory seems inexhaustible, and shipping facilities are good over the Suwannee Railroad to Ellaville, where connection is made with Florida Central & Peninsular trains for Jacksonville.

PRICE & THAYER, of Newberry, Fla., fifteen miles west of Gainesville, are connecting their phosphate mine with the South Florida Railroad by means of a tramway. Some very valuable deposits of phosphate have been discovered in that vicinity recently, and several new mines are being opened.

THE following shipments of phosphates, previously reported as being cleared from Fernandina, Fla., in March last, should have been among the clearances from Port Tampa, Fla., for that month: Netherlands Phosphate Co., 2015 tons by steamship Glendower, for Rotterdam; Florida Phosphate Co., Limited, 713 tons by barkentine E. A. Sanches, for Baltimore; Bone Valley Phosphate Co., 2052 tons by steamer Joseph L. Colby, for Cartaret, N. J.; Barentz & Co., 2760 tons by steamship North Britain, for Hamburg; Anglo-Continental Guano Works, 3005 tons by steamship Guy Corlin, for Hume, and 2801 tons by steamship Jessica, for Stettin; Bone Valley Phosphate Co., 1761 tons by schooner Augustus Welt, for Cartaret, N. J.; Terraceia Phosphate Co., 1012 tons by schooner Senator Sullivan, for Baltimore; Florida Phosphate Co., 2700 tons by steamship Ira, for Genoa—total 18,819 tons.

THE British steamship Westwater cleared from Savannah on the 21st inst. for Bremen. Her cargo consisted of 3000 tons of phosphate from Fernandina and 3949 bales of cotton. On the same date the British steamship City of Truro cleared with 2650 tons of Florida phosphate for Hamburg, shipped by the Cie des Phosphate de France.

THE British steamship North Flint cleared from Fernandina on the 18th inst. and sailed on the 19th for Stockholm and Gothenburg, Sweden, with 2900 tons of phosphate. The British steamship Henrietta H. cleared for Hamburg via Brunswick, Ga., with 2000 tons of phosphate. The British steamship Elmville is due at Fernandina next month to load phosphate for the Dunnellon Phosphate Co.

THE rumor that the French Phosphate Co., at Anthony, Fla., are dismantling its works is without foundation. The company has bought the Plate Rock mine, or the Gordon-Sheely mine, and have sent some of its surplus machinery to one of its other plants. It has let a contract to put its product on the dump for so much a ton. It is said the contractor is mining as much rock with ninety men as was formerly done with 300 men.

WORK is being pushed forward rapidly to get the Fort Meade Phosphate Co.'s plant at Fort Meade, Fla., in shape for mining. When the works get in full operation they will employ over fifty men.

A GUANO factory, a cottonseed-oil mill and an extensive ginney will be built at Valdosta, Ga. The plant alone will cost \$50,000, and \$100,000 has been raised and will be needed to start the work. Fourteen acres of land, one mile west from the courthouse on the River street road, has been purchased of Bird Hightowers, on which the plant will be erected. The fertilizer plant will have a capacity of 10,000

tons, and it is expected that it will be in operation by September.

THE movement in phosphate from Port Tampa during the current month has been of a fairly active character. Among the arrivals we note the British steamship Glencol, on the 18th inst. She is being loaded by the Anglo-Continental Guano Works from the Hamburg Phosphate Co.'s mines. On the 19th inst. the American schooner B. W. Morse arrived for orders, and sailed on the 20th inst. for Gaders Point, where she will load phosphate. The British steamship Somerton arrived on the 20th inst., and is now loading from Floral City and Land Pebble Companies' mines. Among the departures are the steamships Starlight, on the 14th inst., with a cargo of 1817 tons of rock phosphate for Hamburg, Germany, from the Netherlands Phosphate Co., and the Ferrier, on the 19th inst., with a cargo of 2024 tons of pebble phosphate for Hamburg, Germany, from the Bone Valley Phosphate Co., consigned to the Anglo-Continental Guano Co.

The Furnace at Round Mountain, Ala.

The historic Round Mountain furnace, at Round Mountain, Ala., has been purchased by the Round Mountain Furnace Co., of which L. S. Colyar, of Chattanooga, is president. During the war this furnace was run to make iron for the cannon for the Confederate government. After the war it was idle for many years, but it was put into operation and gained a reputation for iron for use in chilled rolls and similar work requiring great strength. It has been out of blast for about three years, but was started early in April, and it is claimed that the present make of iron is superior in color and strength to any ever produced. It is cold blast. The product is fourteen tons per day, but it is expected that this will be increased to sixteen or seventeen tons. The owners claim that it is the best iron made in the United States. This is quite comprehensive, but they say that test will prove it. The sole selling agency has been placed in the hands of Rogers, Brown & Co., of Cincinnati, Ohio, and their branch houses. The iron is held at a figure above the price of ordinary car-wheel brands.

Another Factory for Baltimore.

The T. C. De Prenyal Gas Range Manufacturing Co., of Washington, D. C., has closed a deal with the New Warsaw Land & Industrial Co., of Baltimore, Md., for a large tract of land at New Warsaw, a new industrial town located on Back river, near Baltimore. The price paid for the land was \$5000, and it is the intention of the De Prenyal Company to erect a large plant for the manufacture of a patent gas range invented by Mr. T. C. De Prenyal, who is also president and general manager of the company. Work on the plant is expected to commence at an early day, and when in full operation employment will be afforded from 250 to 300 workmen. Mr. De Prenyal is now in New York city exhibiting his gas range. The establishment of this plant will be another important addition to the many located in and around Baltimore during the last year or two.

Planning for Irrigation in Texas.

A largely-attended mass-meeting of citizens was held at San Saba, Texas, on April 19, to hear a proposition for an extensive irrigation system to be constructed to irrigate the rich and fertile San Saba valley. It is proposed to construct a dam in the San Saba river about seventeen miles above the city, and a syndicate of California and New Mexico parties are forwarding the scheme. Representatives of the projectors attended the meeting above noted, and after the plan had been fully explained a committee was appointed to canvass for the enterprise and report the result at another meeting to be held on the 28th inst.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department, on pages 214 and 215.]

Lumber Directory.

Readers of the MANUFACTURERS' RECORD who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

FOREIGN LUMBER MARKETS.

Europe Must Eventually Look to This Country.

The Hon. Max Judd, consul-general at Vienna, who is now in this country, has furnished some valuable consular reports to the State Department at Washington relating to the empire of Austria-Hungary. His report on the forests of Hungary and of the general lumber trade of Austria is interesting to Southern lumbermen, inasmuch as upon this section of Europe will depend to some extent the chances for a revival in the lumber and timber trade. Mr. Judd says: "From the very best information I can gather this country is not quite ready for the use of American lumber to any great extent. The American lumber exporters should realize that here in Europe their only competitors, especially for German, French and Italian consumption, are the Austria-Hungarian lumber dealers. Up to the present time nearly all the staves used for wine in France and Italy pass through the hands of Austrian merchants, and the same can be said of those used in the breweries of Germany. The forests remaining in Austria proper are nearly all used up, and it is from the Hungarian portion of the empire that most of the lumber is exported. Hungarian forests are mainly owned by the government and city and village communes." Mr. Judd states that the government controls the forests of Hungary, and about three years ago curtailed the cutting of timber, thus making the offerings of lumber in the open market less than formerly. This procedure advanced the price of lumber in Austria, and dealers had to find other markets for a large portion of their stocks, thereby hastening the introduction of foreign lumber, which might have been delayed ten or twenty years. In the consul-general's remarks in reference to the American market he says: "From my own personal knowledge I know of firms who have sent their representatives to the United States to acquaint themselves with the conditions of the lumber trade there and to buy up forest interests, and, although not yet importing lumber, they are preparing to do so in the future. * * The time is very near when the entire European market will be compelled to look to the United States for most of its lumber. Let us in the meanwhile husband our resources, let the destructive extravagance in the extinction and waste of our forest cease, our wealth therein being enormous. We have so much we do not appreciate it."

Shipping North Carolina Pine to Europe.

The increased favor with which North Carolina kiln-dried yellow pine is looked upon in the European market has a marked evidence in the weekly shipments by the various lines of steamers leaving Baltimore. A very significant and important order was recently closed by the agent of the Tunis Lumber Co., of this city, resident at Hamburg, with the German government for lumber for pontoon bridges. The first shipment on the contract was made this week by the North German Lloyd steamship Gera. The dimensions required by the government for this purpose are mostly 1½x12x14 plank, and the present shipment consisted mainly of this dimension. Other

shipments on contract will follow until the order is completed.

A Big Sale of Timber Land.

CHARLESTON, W. VA., April 21.

Editor Manufacturers' Record:

The Mountain Lake Land Co. is selling 26,000 acres of timber land on Big and Little Stony creeks to a number of Chicago people, who have organized the Mountain Lake Lumber Co. and propose building a railroad and erecting saw mills to develop the property. The president is John Sweet, Monon Block, Chicago. F. WOODMAN.

Southern Lumber Notes.

EDWARD DEIBERT & BROS., of Elkton, Md., want to contract for merchantable Georgia yellow pine lumber, delivered at Elkton. They want lumber 3x7½ and 3¼x7½ and twenty-five to forty-five feet long, dressed on both edges and one side or both sides, pieces 8x12 and thirty-six to fifty feet long, 12x12 and thirty-six to fifty feet long in the rough, 3x10 to twelve, and twenty-five to forty feet long in the rough, about 13,000 to 16,000 feet at a time.

THE schooner Mary E. Godfrey cleared from Jacksonville, Fla., last week with a cargo of lumber consisting of 340,000 superficial feet. The vessel left for sea drawing fourteen feet. Lumber freights from Jacksonville are \$1.00 lower than the same period last year, being now \$4.50, against \$5.50.

CHARLES H. BAILEY, of Dallas, Texas, has contracted to place 500,000 feet of cottonwood logs in the Dallas Cooperage Co.'s yards. The logs will be brought from Trinity river.

A SPECIAL from Ashland, Ky., states that 200,000 logs have come out of the Big Sandy, and many mills along the river, giving employment to thousands of hands, will resume operations at once.

THE schooner Cora S. McKay cleared on the 17th inst. from Wilmington, N. C., for Cape Hayti with 157,789 feet of lumber shipped by James H. Chadburn & Co., and the schooner Seth M. Todd for Port-au-Prince with 209,393 feet of lumber shipped by M. E. Kidder's Son.

THE sash, door and blind factory of John T. Smith at Baton Rouge, La., was destroyed by fire on the 18th inst. A lot of new machinery had just been put in and other improvements made. The loss is estimated at about \$5000, with only \$1000 insurance.

WELCH & BAKER are erecting a saw mill at Walker Springs, Ala., sixty-seven miles above Mobile. A dry-kiln and planer will also be built. The new mill will have a capacity of 50,000 feet per day.

THE shipments of lumber during the current month from the port of Fernandina, Fla., will be larger than usual. The water reported on the bar on the 18th inst. was twenty-two feet, and vessels are generally going out with full cargoes. The following schooners will take out lumber as follows: Bessie Parker, for Trinidad, W. I., 220,000 feet; Florence Leland, New York, 270,000 feet, and Ann J. Trainor, New Haven, 324,282 feet. The schooner Nettie Shipman will take out 270,000 feet of yellow pine lumber from Robert Sizer & Co. to New York. Cooney & Eckstein are loading the schooners Grace Bradley and Hattie Dunn. Robinson & Booth will ship about 2,000,000 feet during the month.

THE Southern Cypress Lumber Co., with headquarters in New Orleans, held a meeting on Saturday last in that city for the purpose of discussing matters of interest to the cypress trade. The meeting was presided over by President F. B. Williams, of Pattersonville, La. A number of Chicago lumber merchants were present, as also a number of merchants from the country parishes. Mr. E. F. Pierce, of Kansas, was elected permanent secretary of the

association, with headquarters at White-castle, La. The matter of adopting uniform grades in the classification of cypress lumber was the subject of much discussion. The association decided to adopt the system of establishing uniform grades in the classification of cypress.

ONE of the finest cypress mills in the State of Florida has just been completed by E. J. Copley & Co. at Panasoffkee and started running. The mill is furnished with the latest and most improved machinery, and will employ over seventy-five hands. This firm owns miles of the finest cypress lands in the State. They have a steamer running to Cedar Key, and a dredge has been engaged for some time deepening the channel of the Withlacoochee river.

THE Hutchinson Lumber & Supply Co. has opened a new hardware store at Cordele, Ga., and has procured land on which it will erect a block of brick buildings and a planing mill. A lumber yard will also be started.

LUMBER MARKET REVIEWS.

Baltimore.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, April 26.

There is no perceptible change in the general local lumber market, although some commission men report a slight activity in certain lines. Kiln-dried North Carolina pine is in fair request, and commission men report a material improvement in this department. Orders are more numerous, while prices still show a narrow margin of profit. The foreign demand is improving, and the domestic inquiry is also better. In air-dried pine lumber the volume of trade is about the same, with a fair demand for box grades. There is very little change in the market for hardwoods, and the demand from home and out-of-town sources is light. White pine holds steady at quotations, with a moderate volume of business. The shingle market is quiet, with stocks ample for the demand. Planing mills and box factories report business as a shade better. The report from builders is more encouraging, and there is considerable activity and preparation for projected improvements.

The following table represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE.	
5-4x10 No. 2, kiln dried.....	\$15 00@ 17 00
5-4x12 No. 2, " " " " " " " "	17 00@ 18 00
4-4x10 No. 1, " " " " " " " "	19 75@ —
4-4x12 No. 1, " " " " " " " "	20 75@ —
4-4 narrow edge, No. 1, kiln dried..	16 00@ 17 00
4-4 wide edge, " " " " " " " "	21 75@ —
6-4x8, 10 and 12, " " " " " " " "	20 00@ 22 00
4-4 No. 1 edge flooring, air dried...	15 00@ 15 50
4-4 No. 2 edge flooring, " " " " " "	11 50@ 12 50
4-4 No. 1 12-inch stock, " " " " " "	16 00@ 16 50
4-4 No. 2, " " " " " " " "	13 00@ 13 50
4-4 edge box or rough wide " " " "	9 00@ 9 50
4-4 " " " " (ordin'y widths) " " " "	8 50@ 9 00
4-4 " " " " (narrow) " " " " " "	7 50@ 8 00
4-4x12 " " " " " " " " " "	10 50@ 11 00
¾ narrow edge.....	6 00@ 6 50
¾ wide.....	6 50@ 7 50
¾ 10x16 wide.....	9 00@ 10 00
Small joists, 2½—12, 14 and 16 long.	8 00@ 8 50
Large joists, 3—16 long and up.....	9 00@ 9 50
Scantling, 2x3—16 and up.....	7 50@ 8 50
WHITE PINE.	
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4.	48 50@ 51 50
3d clear, 4-4, 5-4, 6-4 and 8-4.....	43 00@ 44 00
Good edge culls.....	14 00@ 15 00
Good stock.....	17 50@ 18 00
CYPRESS.	
4-4x6, No. 1.....	18 50@ 21 50
4-4x6, No. 2.....	15 00@ 16 00
4-4x6, 16 feet, fencing.....	11 00@ 12 00
4-4x6, rough.....	9 50@ 10 00
4-4 rough edge.....	9 00@ 9 50
4-4 edge, No. 1.....	18 00@ 19 00
4-4 " No. 2.....	12 00@ 13 00
Gulf, 4-4, Nos. 1 and 2.....	29 00@ 31 00
Gulf, 6-4, Nos. 1 and 2.....	31 00@ 32 50
HARDWOODS.	
Walnut.	
5-8, Nos. 1 and 2.....	65 00@ 75 00
4-4, Nos. 1 and 2.....	80 00@ 90 00
5-4, 6-4 and 8-4.....	85 00@ 95 00
Newell stuff, clear of heart.....	85 00@ 100 00
Culls.....	20 00@ 30 00
Oak.	
Cabinet, white and red, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	30 00@ 35 00
Quartered white, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	52 50@ 55 00
Culls.....	10 00@ 15 00
Poplar.	
Nos. 1 and 2, 5-8.....	25 00@ 26 00
" " " " 4-4.....	28 00@ 31 50
Nos. 1 and 2, 6 and 8-4.....	32 00@ 33 00
Culls.....	14 50@ 15 50

SHINGLES.			
Cypress, No. 1 hearts, sawed, 6x20.	7 50@	7 75	
No. 1 saps, sawed, 6x20.	5 50@	6 00	
No. 1 hearts, shaved, 6x20.	6 50@	7 00	
No. 1 saps, shaved, 6x20.	5 00@	5 50	
LATHS.			
White pine.	2 65@	2 70	
Spruce.	2 15@	2 25	
Cypress.	2 15@	2 25	

Norfolk.

[From our own Correspondent.]

NORFOLK, VA., April 23.

No very decided improvement in the lumber market here has taken place during the past week, and the current drift of business is not materially changed. Millmen are not much encouraged by the future outlook, but all the mills are running and waiting for a reaction in trade. Stocks of kiln-dried North Carolina pine-flooring grades of lumber are fully ample for the present demand. The present shipments consist largely of box grades, which are in good demand, while very little No. 1 and No. 2 lumber is shipped. Air-dried pine lumber is in good request, especially for 10-inch box boards, which are sold readily on arrival. Prices for dressed lumber are still low, and planing mills are in receipt of a moderate supply of orders—about of sufficient number to keep them running regularly. Box factories and other woodworking plants were more fully employed during the past week. There is an ample supply of handy-sized tonnage in the harbor for the charter demand, and rates on lumber are unchanged, as follows: \$2.20 to \$2.40 is asked for New York business, \$1.00 to \$1.10 for Baltimore and \$1.40 to \$1.50 for Washington, D. C. The Roanoke Lumber Co.'s mills at Money Point, which were badly damaged by the recent fire, have resumed. A large force of workmen are employed rebuilding the destroyed property at the Point, and in a short time all the works will be in operation again. The operations of the Graham Lumber Co., whose output was 50,000 feet daily, have been stopped by an injunction from the United States Court, on account of the litigation over the Lasker survey, from which the company obtains logs. The saw mills will run, however, as the supply of logs on hand will last sixty days.

Charleston.

[From our own Correspondent.]

CHARLESTON, S. C., April 23.

There has been very little activity present in the general lumber market during the past week, and there is no decided demand existing at the moment. There is, however, a good inquiry for cross-ties, and several cargoes have been cleared during the week, but for lumber matters continue quiet. Prices are steady, with no material change to note, and quotations as follows: Merchantable, \$14.00 to \$16.00 for city sawed and \$12.00 to \$14.00 for railroad; square and round, \$9.00 to \$13.00 for railroad and \$8.00 to \$11.00 for raft; dock timber, \$4.50 to \$6.50, and shipping, \$8.50 to \$10.50. There is a fair demand for shingles at \$5.00 to \$7.00 per thousand, as to quality and condition. The shipments of lumber reported for the week were as follows: Schooner Frank Vanderherchen with 432,000 feet of cross-ties and by steamer one car of shingles to New York; schooner Ellwood Harlow for Philadelphia with 671,000 feet of lumber, and schooner Nelson E. Newberry with 571,000 feet of cross-ties. The total shipments of lumber from this port since September 1, 1893, amount to 32,813,333 feet to coastwise ports and 2,165,000 feet to foreign, making a total of 34,978,333 feet, against 33,633,723 feet for the corresponding period last year. Freight rates are generally quiet, with no material change to note.

Savannah.

[From our own Correspondent.]

SAVANNAH, GA., April 24.

In the general lumber market the situation continues about the same as last reported. There is no decided improve-

ment in any direction, yet the demand continues regular, while the volume of trade is light. Advices from saw-mill sections in the interior of the State are somewhat more encouraging and mills are nearly all running on full time. At Cordele the Hutchison Lumber & Supply Co. has procured land on which it will erect a planing mill and open an extensive lumber yard. There is a better demand for railroad ties, and during the past month some large contracts have been closed with Northern parties. Prices still continue to rule easy, and are now down so low that the margin of profit is very narrow. The quotations are as follows: Easy sizes, \$11.25; ordinary sizes, \$11.00 to \$14.00; difficult sizes, \$13.00 to \$18.00; flooring boards, \$13.50 to \$22.00, and shipstuffs, \$16.50 to \$25.00. The following vessels were cleared with cargoes of lumber during the past week: Schooners Harold Borden, for Monte Cristo, St. Domingo, with 110,929 feet of pitch pine; Hilda, for Baltimore, with 448,479 feet, shipped by Dale, Dixon & Co., and General Adelbert Ames, for Portland, Me., with 364,332 feet, shipped by the Georgia Lumber Co. The schooner Flora Rogers arrived several days ago and is chartered by the Georgia Lumber Co. to load for a coastwise port. The New York steamers took out about 250,000 feet of pitch-pine lumber during the week; Boston steamers, 62,387 feet, and Baltimore steamers, 33,000 feet. The lumber freight market is quiet at current rates. From this and nearby ports of Georgia the quoted rates are \$4.00 to \$5.00 for a range including Baltimore and Portland, Me. To the West Indies and Windward rates are nominal; to Rosario, \$12.00 to \$13.00; Buenos Ayres or Montevideo, \$10.00 to \$11.00; Rio Janeiro, \$14.00, and to Spanish and Mediterranean ports, \$11.30 to \$11.50. To the United Kingdom for orders rates are nominal at £4 5s. per standard. Steamer rates to New York and Philadelphia \$7.00, to Boston \$8.00 and Baltimore \$5.00.

Pensacola.

[From our own Correspondent.]

PENSACOLA, FLA., April 23.

During the past week the market has shown rather more activity, and shipments are showing a marked increase in volume. The inquiries are more numerous, and several large orders have been placed during the week by Northern parties. The advices from Europe are not any more encouraging, while stocks of timber there are being somewhat reduced, but as yet the demand has not materialized. For lumber there is a better inquiry, and a considerable amount will go forward during the summer. The shipments during the past week were for United Kingdom and Continent, Mexico, Central America and for Northern ports, and aggregated over 3,000,000 feet of lumber and about 4,000,000 feet of sawn timber. The freight market continues quiet and firm for pitch-pine tonnage, and recent charters have been made at a slight advance on previous quotations. Current rates are £4 15s. and £4 17s. 6d. United Kingdom or Continent, ann £5 might be done for small vessels. There is some inquiry for Rio Janeiro on the basis of \$14.00, and for Buenos Ayres \$11.00 and \$11.50.

Mobile.

[From our own Correspondent.]

MOBILE, ALA., April 23.

During the past week there has been a fairly active market in lumber, and the demand is more diversified, with a better inquiry from both domestic and foreign ports. In timber there is no improvement, and the market is very quiet, with very little encouragement from European centres. The market for hewn timber is steady at about 10½ to 11 cents per cubic foot for 100 feet average and classing B1 good. Sawn timber is firm at 11½ to 12

cents per cubic foot, basis of forty feet average. The clearances for the week were 5620 cubic feet for Falmouth, England, and 32,814 cubic feet for London. The shipments of lumber aggregated 1,704,160 superficial feet, of which 488,600 feet went to Boston, 150,945 to London, 284,217 to Cuba, 377,964 to Rosario, Argentine Republic, and the balance to other foreign and domestic ports. The total shipments of lumber and timber from this port since September 1, 1893, were as follows: Hewn timber, 1,076,587 cubic feet, against 1,817,446 cubic feet for 1892-93; sawn timber, 1,654,511 cubic feet, and for the corresponding period last year, 1,701,955 cubic feet. The shipments of lumber aggregate 43,883,874 superficial feet, against 52,601,756 superficial feet in 1892-93. Lumber and timber freights remain unchanged and the market is steady. Rates for lumber to the West Indies are quoted \$5.00 to \$6.00; coastwise, \$5.25 to \$5.75; Rio Janeiro, \$12.00 American gold, and Mexico, \$7.50 to \$8.50; timber to the United Kingdom, 28s. to 30s. per load for hewn, and £4 7s. 6d. to £5 per standard for sawn. Steamer rates on lumber and timber are still quoted £5 10s. to £5 12s. 6d. Advices from the saw-mill sections in the interior of the State report mills as generally employed, with prices still on a low basis. Two miles south of Walker Springs, on the Mobile & Birmingham road, and sixty-seven miles above this city, a new station has been established called Glendon. At this point a large saw mill is being erected by Messrs. Welch & Baker, formerly of Chilton, Ala., and proprietors of the Chilton Lumber Co. A dry-kiln and planer will also be built, and the capacity of the new mill will be 50,000 feet a day.

Beaumont.

BEAUMONT, TEXAS, April 21.

The local lumber market continues to show some improvement, and the existing features are more encouraging than for some time past. Shipments of yard orders during the past week have been larger than any corresponding period since last September, although the figures have been so low. A few timber bills have been booked, and the outlook for this material is rather bright, as a number of railroads are contemplating radical betterments along their lines. Shipments via Sabine Pass are going forward very satisfactorily, and the wharves at the Pass are crowded with lumber, while the different vessels get quick dispatch. Two vessels completed their cargoes this week, and will clear today, the schooners Clara A. Phiney, for Coatzacoalcas, with 300,000 feet, and the Fanny Whitmore, for Manzanilla, with 480,000 feet. The schooner Severn, now in port, was chartered yesterday, and will load for a Southern port. There are yet remaining five cargoes on the export company's books to be dispatched, and the inquiries coming in denote a good future trade. A distinguished party of railroad capitalists visited the Pass a day or two ago, and were highly pleased with the outlook, and were surprised to find a greater depth of water than they expected. Contractor Clark placed a tug at their disposal for a trip to the end of the jetties, and soundings were made along the channel and outside the channel. Stocks of shingles are greatly reduced, yet the demand does not improve and prices have not advanced. At Orange about 25,000 logs have reached the booms on the present rise in the river, which is yet too high for pine to be turned loose with safety. Considerable cypress has been floated out of the swamps during the past week, which is of excellent quality and some of the logs of unusual size, scaling as high as 4700 feet. A portion of the timber obtained from the swamps on the Neches will be towed down to the lake and up the Sabine to the L. Miller Shingle Co. at Orange.

Iron Markets.

CINCINNATI, April 21.

The same monotonous conditions have prevailed for the past week, broken only by rumors of strikes. Business has run light in all directions, partly because of general lack of interest in the market on part of consumers, and partly because Alabama furnace companies have practically withdrawn from the market on account of the strike of 9000 miners. The latter trouble gives no promise of early adjustment. If it continues for any length of time it must inevitably curtail sharply the production of Alabama iron. Inasmuch as most of the Alabama furnaces are shipped up close on orders for most grades, a prolonged strike might cause considerable inconvenience.

The intelligence from Pittsburg is that the tonnage of Bessemer sales, both for consumption and for speculative account, have been very heavy in the past ten days. The product of most of the furnaces is now pretty well sold, and marked firmness exists in Bessemer pig, steel billets and other allied products.

Foundries doing engine and machine work report an enlarged inquiry, particularly in lines connected with electrical construction, street railroads, city improvements, etc. Apparently there is a good deal of work in sight that will come out in the next sixty days. There is a little more sign of life also in car-building, particularly from refrigerator companies and private lines. The railroads themselves are not yet buying anything that can be avoided. Generally speaking, the situation is a waiting and a hopeful one, but without much encouragement actually in sight.

We quote for cash f. o. b. Cincinnati:

Southern coke No. 1 foundry.	10 50@	10 75
South. coke No. 2 foundry, and No. 1 soft.	9 50@	9 75
Hanging Rock coke No. 1.	12 50@	13 00
Hanging Rock charcoal No. 1.	16 00@	17 00
Tennessee charcoal No. 1.	14 00@	14 50
Jackson county stone coal No. 1.	14 00@	16 00
Southern coke, gray forge.	8 75@	9 00
Southern coke, mottled.	8 50@	8 75
Standard Alabama car-wheel.	16 25@	17 25
Tennessee car-wheel.	15 50@	16 00
Lake Superior car-wheel.	16 00@	16 50

We quote for cash f. o. b. St. Louis:

Southern coke No. 1.	10 75@	11 00
Southern coke No. 2.	9 75@	10 00
Southern coke No. 3.	9 50@	9 75
Southern gray forge.	9 00@	9 25
Southern charcoal No. 1.	15 00@	16 00
Missouri charcoal No. 1.	12 00@	12 50
Ohio softeners.	14 50@	15 00
Lake Superior car-wheel.	16 50@	17 00
Southern car-wheel.	17 00@	17 50
Frick's Connellsville foundry coke.	4 50	

PHILADELPHIA, April 21.

The belief becomes more and more general that it is an utter impossibility to pass the Wilson bill in its present shape, and consequently there is a stronger undertone to the market. If it was a decided fact that wool, iron and iron ore, with the product of the three crude materials mentioned, would not be tampered with by the present administration, we would once more listen to the musical sounds made by the busy loom and forge. We would witness such a revival in business as to stagger our free-trade neighbors. These strikes in the South among ore miners, coal miners in Pennsylvania, railway employees' strikes in the West, the marching of the unemployed toward Washington, Hill's conversion and other internal upheavals constantly going on will eventually bring about good results. Until then no radical change is to be expected. Sales in both foundry and forge irons have been light this week.

We quote for cash f. o. b. Philadelphia docks:

Standard Alabama No. 1 X.	12 50@	12 75
Standard Alabama No. 2 X.	11 50@	11 75
Strong lake ore coke iron No. 1 X.	14 25@	14 50
Strong lake ore coke iron No. 2 X.	13 25@	13 50
Lake Superior charcoal.	16 50@	17 00
Standard Alabama C. C. W.	18 25@	18 75

We quote for cash f. o. b. New York:

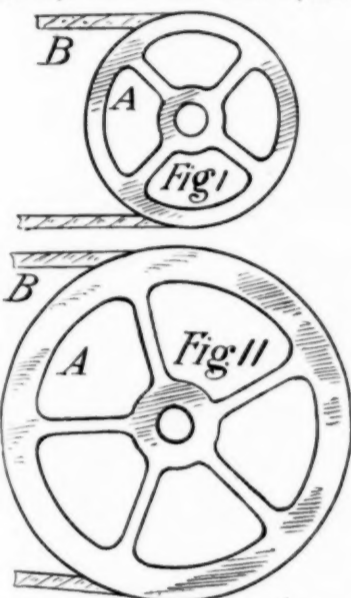
No. 1 foundry lake ore coke iron.	15 00@	15 50
No. 2 foundry lake ore coke iron.	14 50@	15 00
No. 1 American-Scotch.	15 00@	15 50
No. 2 American-Scotch.	14 00@	14 50
No. 1 standard Southern.	12 50@	12 75
No. 2 standard Southern.	11 50@	11 75
No. 1 standard Southern soft.	11 75@	12 50
Standard Southern car-wheel.	18 50@	19 00

ROGERS, BROWN & CO.

MECHANICAL.

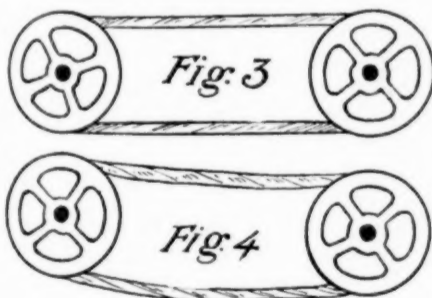
Power Transmission.

The rope system of power transmission for cotton, woolen, flour and in fact all kinds of mills is becoming more or less popular. In some places the popularity of the rope drive is quite well established; in other places the system is heartily condemned. It has been the privilege of the writer to investigate the matter for the purpose of ascertaining the reason why such wide differences should prevail. Belts are largely used for driving purposes in some of the most extensive plants in the country. They are successful, and fulfill the requirements in that the machinery is driven day after day, and the mill makes a product.



But so long as there are other methods of driving shafting the manufacturer will not rest until he has assured himself that his mill is equipped with the best. The method of driving shafting and machinery with ropes presents another system, and is one which is interesting to all millmen. Hence, we look into the matter. From the standpoint of a millman (for the writer was a millman for some fifteen years), the rope system fails to give satisfaction in many instances on account of improper adjustment of the same.

The chief trouble with ropes is that they wear out too soon. There are cases on record in which a manufacturer has put in the rope system and taken it out again, because the ropes have worn out in a few months. I investigated one of the places



where such a thing had happened, and found the wheels over which the ropes had to run were far too small.

In cut herewith we show two wheels. The proportionate size shown by the one designated by Fig. 2 is what a wheel should be in diameter. In Fig. 1 is shown the proportionate size of the wheels which I found used in the system in which the ropes wore off too soon. In both figures the letter A indicates the wheels and B the ropes. It stands to reason that the wear on a rope which must circle around the small wheel is far greater than that of the big one. It is the same as taking a piece of rope and bending it up and down like a hinge. If the leverage is short the fibres will soon break, whereas if the leverage is long the breakage is less. Yet the manu-

facturer who had adopted the rope system and used very small wheels expected that the ropes would run over the little wheels at the rate of about 200 times per minute for ten hours a day and yet not wear out. With the proper sized wheels the ropes will run for months without wearing, but with small wheels the wear begins at once. The grooves should be plenty large, so that the rope will not bind. Large grooves and wheels about seven feet in diameter are good, but don't try with small grooves and wheels two and a-half feet in size. Furthermore, I found in another place that the right sized wheels were used, but the ropes were wearing out with great rapidity. I investigated and found that the boss of the motive power had an idea that the ropes should be tight as fiddle strings.

I looked the system over and saw that the ropes were too tight, as illustrated in Fig. 3 in the drawing. The ropes should sag and they should sag as much as indicated in Fig. 4. There is no sense in running the ropes too tight; power is lost, and the strain is severe on the shafting and there are a dozen other evils beside the wear upon the ropes. Of course, the friction is increased with the tight rope, and with more friction comes more wear. In the case mentioned the fibre of the ropes would wear rapidly, and the owner of the mill was disgusted. He listened to an explanation, however, and loosed the ropes, and to last accounts is deriving the benefit, as his ropes now last as long as intended of them. The rope system is good enough when handled right, but if abused it is something to be dreaded.

GEORGE DAMON RICE.

A Modern Dry-Kiln.

With the planing-mill firms and wood-workers influential considerations in the selection of a dry-kiln are suitability for a particular line of work, efficiency in turning out boards free from case-hardening, checking, splitting at the ends or warping and twisting; cost of daily operation, including repairs, and the first cost of kiln ready for operation. To fulfill these requirements is the aim of the Acme Dry-Kiln Co., and with this in view it has built a kiln on new and scientific principles, said to be radically different from any hitherto employed.

As implied by its name, the Acme natural draft and absorption dry-kiln dries lumber by the aid of both a natural draft on the one hand and an absorption floor of sand on the other. Its method of working is described as follows: The natural draft carries off that part of the moisture absorbed by the air, where the air as it rises is not too heavily laden with moisture. The absorption floor of sand absorbs the moisture when the air becomes so heavily laden with it as to cause it to fall instead of to rise, and as the absorption floor is underdrained, the moisture passes through and trickles to the ground beneath. There being an open space between the sand floor and the ground, through which the wind has full play, this moisture is immediately absorbed and carried off by the air. The heat in the kiln is furnished by a floor of one-inch steam pipes, located above the sand floor and running lengthwise the kiln, as shown in cut. These inch pipes branch out from a four-inch header located near the front or entrance end of kiln. After running almost the full length of kiln these pipes drop perpendicularly eighteen inches and intersect another header beneath located near the rear or discharge end of kiln. The pipes are only about two inches apart, and are just beneath the track sills. The rear header rests on rollers, in order that the inch pipes may expand or contract at will, and, as they do so, may force the header backwards or forwards. As this header moves freely, all cause for leaks and bursted pipes is, it is stated, re-

moved. This arrangement, in connection with the drop pipes, makes, it is considered, a perfect heating system.

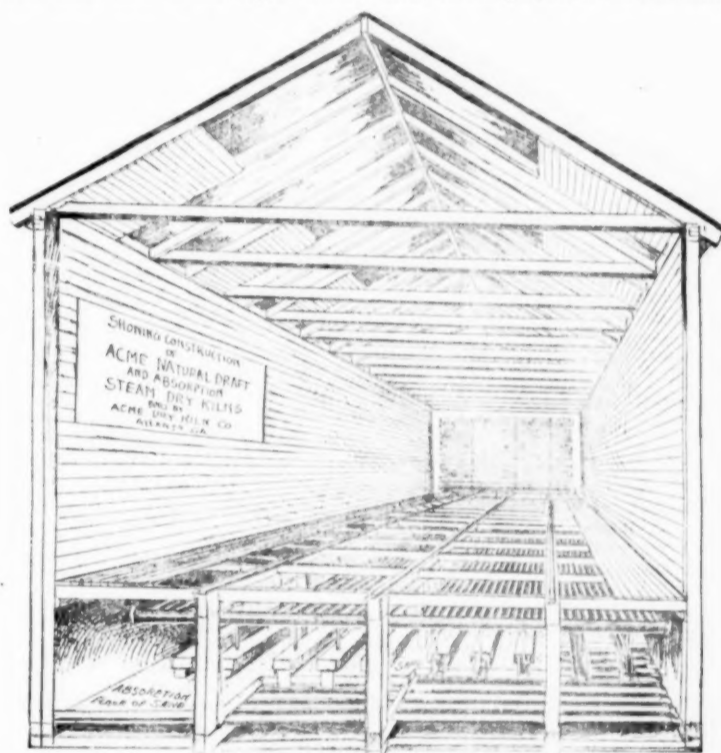
To create a natural draft the air is allowed to enter the kiln through boxes located at intervals all over the floor. The bottoms of these boxes are open and communicate in this way with the open space between the sand floor and ground. Each row of these boxes has a hood over its top and encloses a steam pipe connecting at each end of kiln with the headers. The air, upon entering these boxes from beneath, is retained therein long enough to be heated by the steam pipe, and is then allowed to escape into the kiln through the proper openings between the tops of boxes and hoods above. The current of air is admitted into the kiln hot instead of cold in order to avoid neutralizing the heat already in the kiln. This is pointed out as being especially necessary in cold weather, and is a principle said to be used only by this company. It enables the Acme kiln, according to the manufacturer, to dry as much lumber in cold weather as in warm.

The spaces between the boxes or air-ducts running lengthwise of kiln are filled in with loose sand to the depth of four

The ducts located in the rear end of the roof are left open at all times, so that the moisture can escape readily at that end of kiln.

It is deemed necessary to surround the lumber in the front end of the kiln with steam, in order to dry it (especially thick boards) rapidly and without injury. This, it is claimed, prevents lumber two inches thick and over from checking. By check is meant that in holding it in kilns sufficiently long to dry it thoroughly it dries first on the outside, and as the outside dries it shrinks and becomes smaller. In the attempt to extract moisture from the inside of boards the fibre on the outside becomes so strained and drawn that it pops open and leaves a seam, which is commonly called a check. By surrounding these boards with steam they are kept sufficiently wet, it is stated, to give the outside of each board enough elasticity to enable it to stretch instead of popping open as it shrinks. By this means the pores are kept open, so as to allow the moisture from the centre to escape easily without injury to the exterior.

As each car in turn is moved down towards the rear end of the kiln it becomes drier, entering a part of the kiln which has



THE ACME NATURAL-DRAFT AND ABSORPTION DRY-KILN.

inches. The object of this sand floor has already been described. It is particularly necessary in the front end of the kiln, where there is so much moisture, on account of the lumber being green in that end. The air, upon entering the kiln, absorbs the moisture drawn out of boards by action of the heat, just as a sponge absorbs water. The greater the heat the more moisture the air will absorb. There being more heat and more moisture in the front end of the kiln than any other part, the air becomes more heavily laden with it, and by means of a sufficiently high temperature in this end of the kiln, steam is made of this moisture. By means of expansion of this steam a certain amount of pressure is obtained.

It will be seen from the cut that there are a series of outlet air-ducts arranged in the roof of kiln. These air-ducts extend down the roof between the rafters, and have their outlets on the outside of the building just beneath the eaves. In the front half of the roof these air-ducts have automatic dampers of light sheet iron hinged and swung from their tops, and also at the discharge end of the ducts, so that when the steam pressure in kiln becomes too great, the pressure opens the dampers automatically, allowing the steam to escape.

more ventilation and less heat. The steam from the boiler enters the front header, and, being distributed into the branch pipes, travels on down the full length of the kiln until it empties into the rear header. To this header is attached a trap, by the aid of which all water condensed in the pipes is automatically discharged as fast as it accumulates in the trap. By this arrangement the greatest heat is obtained in the front end of the kiln. The pipes in that end being nearer the boiler, are necessarily the hottest, and hence throw off more heat. The Acme Dry-Kiln Co., Grant Building, Atlanta, Ga., can be addressed for further particulars.

Two new companies are now attempting to bring out in Texas new methods of compressing cotton. The Rembert compress, fully described in the MANUFACTURERS' RECORD a year or so ago, has since been improved, and, it is claimed, will now press cotton down to forty pounds a cubic foot. In Waco a company is trying to introduce a press which will make a cylindrical bale. It has been claimed that the Rockefeller are interested in this latter company, but it would not be wise to accept such statement without something more definite than rumors.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found under the head of "Machinery Wanted."

†In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Anniston—Laundry.—W. H. Langley will open a new laundry.

Birmingham—Iron Works.—The Birmingham Iron Works, consisting of a large foundry and machine shop, were sold at receiver's sale on 16th inst. R. M. Wamsley, of New Orleans, acting as trustee for the bondholders, bought in the plant at \$50,000. Operations will be resumed at once on orders now booked.

Birmingham—Feed and Grain Mill.—The new grain and feed mill built by Comer & Wilkinson has been completed, and will be put in operation at once. The plant is thoroughly equipped with the latest machinery and has a capacity of 2500 bushels daily.

Birmingham—Furniture Factory.—The Southern Manufacturing Co. is building a \$10,000 furniture factory, consolidating three plants that were idle. The raw timber will be sawn, kiln-dried and made into furniture.

Bridgeport—Grist and Saw Mill.—G. A. Benner will operate a saw mill and grist mill at Island Creek.

Coaling—Coal Mines.—Walter Smith & Co., of Tuscaloosa, are, as reported last week, opening coal mines at Coaling. Two openings are in operation, with about fifty men at work; capacity 100 tons daily.

Glendon (P. O. Walker Springs)—Saw-mill Plant.—Welch & Baker, formerly of Chilton, are erecting a large saw-mill plant, including planer and dry-kiln, at Glendon, two miles from Walker Springs. The new mill's daily capacity is 50,000 feet of lumber.

Huntsville—Carriage Works.—The Skinner Wagon Works, lately noted as being enlarged, is replacing its old wooden building with a new two-story brick structure 62x87 feet. All machinery needed has been purchased.

Marion—Water Works.—Artesian well will be driven and water works constructed. Address the mayor.

Piedmont—Shoe Factory.—Geo. D. Harris, J. H. Ledbetter and T. P. Ledbetter have obtained control of the Piedmont Shoe Factory and will put the plant in operation at once. Fifty hands will be employed.

Randolph County—Gold Mines.—It is reported that Western parties have purchased an interest in the Goldberg Mining Co.'s property for \$20,000, and that this amount will be expended on a new plant for treating the gold ore.

Round Mountain—Iron Furnace.—The Round Mountain Furnace Co. has been organized and obtained possession of the Elliott Pig Iron Co.'s furnace and will operate it. L. S. Colyar, of Chattanooga, Tenn., reported in February as having leased this plant, has been chosen president of the new concern. Rogers, Brown & Co., of Cincinnati, Ohio, have been made the selling agents for the product.

Short Creek—Electric-light Plant and Paint Mill.—W. T. McCord and W. N. McKnight, who are opening coal mines on Short Creek, contemplate erecting a mill for grinding paint ore and a plant for electric lighting.

ARKANSAS.

Camden Foundry.—The Camden Foundry & Machine Co. will build a foundry.*

Eureka Springs—Water Works.—The water commissioners of the city have let contract to R. T. Brownell, of Chicago, for the construction of a

water-works system, embracing nearly six miles of mains. The cost is to be \$80,000.

Fancy Hill—Saw Mill and Wagon Works.—J. D. Hollifield intends to put in a saw mill and start wagon works.*

Little Rock—Factory.—A proposition to locate a \$1,000,000 factory in Little Rock upon the subscription of half the stock by local capitalists has been made to the Commercial League.

Little Rock—Boat Works.—The American Air-Boat Co. has been organized with a capital stock of \$50,000 to manufacture a rubber air sporting boat, patented by H. D. Layman. H. H. Rattaken is president; J. P. Quinn, vice-president, and M. H. Johnson, secretary-treasurer.

FLORIDA.

De Land—Cassava Factory.—A Mr. Chants proposes to organize a company to establish a cassava factory.

Fulton—Preserving Plant.—William Fisher has recently started the manufacture of Florida preserves and orange marmalade.

Jacksonville—Fertilizer Works.—Chapman & Sudlow have started fertilizer works.

Jacksonville—Lumber Mills.—The Cummer Co., of Norfolk, Va., writing in regard to the report that it will erect mills at Jacksonville, says that it will not build at present.

Jensen—Canning Factory.—A canning factory is being built in Jensen. John S. Park can be addressed.

Ocala—Iron Works.—Rogers & Dennis, recently established, are building calcining furnaces for treating phosphate and other materials.

Tampa—Livery, etc.—L. G. Cole is endeavoring to organize the Tampa Livery, Sale & Transfer Co. with a capital stock of \$50,000, and \$27,000 has already been secured.

Titusville—Fibre Factory.—A company has been organized by Captain Pritchard for the purpose of erecting factory for manufacturing palmetto fibre.

Ybor City (P. O. Tampa)—Cigar Factory.—J. Seidenberg of Key West, has entered into contract to erect a \$25,000 cigar factory in Ybor City, and will employ from 300 to 500 hands.

Ybor City (P. O. Tampa)—Natatorium.—The Ybor City Ice Works write in regard to the report noted several days ago that it is to erect a new plant, that estimates are now being secured for a natatorium 50x80 feet in size, to be built in connection with its ice plant.

GEORGIA.

Acree—Saw Mill.—J. T. Mayo may possibly rebuild his burned saw mill.

Atlanta—New Power Machinery, etc.—The Atlanta Consolidated Street Railway Co. will make extensive improvements to its electric-power plant and put in new machinery. The company also intends to arrange for manufacturing various supplies and specialties used on its railway.

Augusta—Shoe Factory.—D. M. Wilson has made the Young Men's Business League a proposition for the erection of a shoe factory, to start with a daily capacity of 200 pairs, employing thirty hands. Address Mr. Wilson, in care of the Young Men's Business League.

Augusta—New Cotton Machinery.—It is said that the Sibley Manufacturing Co. is considering adding more machinery to its cotton mill.

Cohutta—Creamery.—W. D. Jones, W. E. Kennedy, H. B. Murphy, J. F. Wilson and W. H. Pittner have incorporated the Cohutta Butter and Cheese Factory with a paid-in capital of \$5250. A creamery will be built.

Cordele—Planing Mill.—Moore, Kirkland & Co. will erect a new planing mill.

Forsyth—Electric-light and Water Works.—The city will hold an election on May 18 to determine whether or not \$7000 in bonds will be issued for an electric-light plant and \$18,000 in bonds for a system of water works. Address R. G. Anderson, city clerk.

Macon—Mercantile, etc.—J. W. Cabaniss, W. R. Holmes, O. N. Dana, Robert E. Rogers and Wm. B. Birch have incorporated the J. W. Burke Co. to deal in stationery, etc. The capital stock is placed at \$10,000.

Marietta—Paper Mill.—Saxon A. Anderson has purchased the old Kennesaw Flour Mills' building and will re-equip it with complete outfit for the manufacture of paper.*

Milledgeville—Machine Works.—G. W. Stubbs has leased and will operate the Pooser Machine Works.*

Savannah—New Machinery.—The Press Publishing Co. is putting in electric motors for power, fitting up new shafting, elevators, etc.

Thomson—Truss Factory.—Dr. Cicero Gibson has erected a truss factory.

Valdosta—Guano Works, Oil Mill and Gin.—B. P. Jones, J. R. Saunders and Frank Roberts have

organized the Valdosta Guano Co. with Mr. Jones as general manager. Fourteen acres of land have been purchased as a site, and a guano factory, cottonseed oil mill and cotton ginnery will be built at a cost of \$50,000. The fertilizer plant will have a yearly capacity of 10,000 tons. It is expected that the plant will be in operation by September.

KENTUCKY.

Danville—Water Works.—The city election held on the 18th inst. resulted in favor of bonds (\$70,000) for water works. Specifications will be prepared at once, and contract for construction let within thirty days. Address the mayor.

Deanfield (P. O. at Etnaville)—Coal Mines.—W. F. Browder, of Russellville; D. W. Saunders, of Louisville, and their associates, noted during the week as having purchased coal lands near Deanfield, have incorporated the Deanfield Mining Co. A mining plant will be built at once and operations commenced in charge Geo. C. Roberts.

Clinton—Woodworking Plant.—An Indiana party proposes to establish a trunk-slat factory in Clinton if the citizens will donate a site and pay for the removal of the machinery.

Cloverport—Brick Works.—The Patton Vitriified Brick Co. is overhauling its plant and preparing to resume operations.

Cloverport—Brick Works.—The Acme Vitriified Brick Co. will at once put its plant in order, make some necessary repairs and resume operations.

Henderson—Sewerage System.—G. E. Waring will prepare plans for a system of sewerage. Address S. H. Kimmell, city engineer.

Louisville—Publishing.—A \$500,000 stock company, with \$200,000 paid up, is now being organized to publish a daily newspaper, to be known as the Louisville Leader; Louisville, Lexington and Pittsburg (Pa.) parties are interested. Wesley M. Morrison, of Louisville, is to be business manager, and can be addressed.

Louisville—Telephone Line Extension.—It is said that the Cumberland Bell Telephone Co. intends to extend its telephone line from Louisville to Nashville, Tenn., and thence to Memphis by way of Jackson, Tenn.

Louisville—Increase Capital.—The Louisville Gas Co. will increase its capital stock by \$600,000.

Middlesborough—Water Works.—Contract to complete the Middlesborough water system has been let. The Middlesborough Water Co. has agreed to raise its dam to a height of full thirty-five feet, and to duplicate its present pumping machinery, which work will cost something like \$40,000. When this is done the reservoir will have a capacity of 1,800,000 gallons of water, and can deliver 6,000,000 to 8,000,000 daily for use. McFarland & Condon, of Knoxville, Tenn., have taken the contract for this work. The new pumping machinery has not yet been purchased, but A. H. Martine, superintendent, is now investigating to secure the best. The water works are to be completed within sixty days.*

Middlesborough—Iron Furnaces.—The Watts Steel and Iron Syndicate, Limited, will put its furnaces in operation as soon as a satisfactory supply of water is secured, which will probably be by June 10.

Middlesborough—Water Works.—McFarland & Condon, of Knoxville, Tenn., have the contract to complete the Middlesborough water system. The cost will be about \$40,000.

Newport—Button Works.—Young Bros., of Dayton, Tenn., manufacturers of pearl buttons, will, it is reported, remove their works to Newport.

Newport—Transportation.—David Gibson, M. L. Hissem, W. T. Hissem, John Abram, G. W. and A. R. Brown have incorporated the Tacoma Transportation Co., with a capital stock of \$12,000, to buy, sell and operate steamboats.

Nicholasville—Furniture Factory.—It is possible that the Middlesborough (Ky.) Furniture Factory will be removed to Nicholasville, the sum of \$30,000 having been subscribed in the latter place to secure the plant in event of removal. Strenuous endeavors will be made to keep the plant in Middlesborough.

LOUISIANA.

Lakeland—Oil Mill.—A new cottonseed-oil mill to replace the one lately burned will be built and work is to commence soon. The company has organized under the name of the Lakeland Planting & Manufacturing Co., Limited, and applied for charter. Marshall P. Phillips is president; W. D. Phillips, vice-president, and R. M. Phillips, secretary-treasurer.

Monroe—Wagon Works.—The Ouachita Wagon Works has been organized, and a plant will be built at once. The capital stock is \$30,000, \$12,000 of which is subscribed, and M. Millsaps has been chosen president; Fred G. Snyder, vice-president and manager; Mr. Millsaps, Mr. Snyder, Fred G. Hudson, B. V. McDonald and Herman Meyer, directors. The business will be a removal

and continuation of the plant formerly operated at Camden, Ark., by Mr. Snyder.

New Orleans—Candy Factory.—B. Thoens proposes to organize a stock company for the purpose of establishing a candy factory to use a patent stick-candy machine which he has invented. Bernard Klotz and R. R. Schmidt are also interested.

New Orleans—Tinware Works.—F. J. Cooke, secretary of the Young Men's Business League, writing in regard to the proposed tinware works, says that the prospects are good for securing the plant, but the deal is not yet closed; probably will be closed this week.

New Orleans—Ice Factory.—The Crescent City Ice Co. has petitioned the council for permission to erect boilers and machinery for an ice factory at Antonine and Tchoupitoulas streets.

MARYLAND.

Baltimore—Photographic Supplies.—Jas. S. Cummins, Charles W. Newton, Roderick Andrews, Lewis P. Dieterich and William Creand have incorporated the Cummins Photo Stock Co. to deal in photographic materials. The capital stock is \$20,000.

Baltimore—Fertilizer Factory.—Michael Dorsey intends to establish a fertilizer factory at the intersection of Patuxent and Dillon streets.

Baltimore—Vegetable Importers.—Alexander B. Bulack, John D. Hart, John Molan, Joseph Bulack and Frank S. Bayless have incorporated the Bulack Hart Co. to sell and transport foreign and domestic vegetables. The capital stock is placed at \$25,000.

Belair—Electric-power Plant.—The Archer and Howard flour mills, near Belair, lately purchased by the Henry Record Manufacturing Co., will be operated by electric-power plant to be installed shortly. Water-power will be utilized.

Bladensburg—Iron Bridge.—Sealed proposals for the construction of an iron bridge across the Spa branch will be opened on May 8 by the commissioners of Prince George's county. Address Wm. W. Roberts.

Chestertown—Electric.—The Chestertown Electric Co. has been organized and elected a committee to solicit subscriptions. Books will be opened at several places in the county, also at Baltimore.

Crisfield—Electric-light Plant.—The town commissioners are contemplating the installation of an electric-light plant.

Cumberland—Telephone Lines.—The Citizens' Telephone Co., noted during the week as organized, intends to construct a metallic circuit telephone system for about 300 subscribers, and it is proposed to connect with the mining towns of Frostburg, Lonaconing, Barton, Westernport and Mt. Savage. Jno. T. Edwards, secretary.*

Cumberland—Shirt Factory.—A Massachusetts party contemplates erecting a shirt factory in Cumberland to employ 300 girls. M. V. Richards, of Baltimore & Ohio Railroad, of Baltimore, can be addressed for information.

Friendsville—Timber Lands.—A party of Indiana capitalists have purchased 5000 acres of timber lands near Friendsville, and will build a narrow-gauge railroad to open up the tract. M. V. Richards, of Baltimore & Ohio Railroad, Baltimore, can be addressed for information.

Gaithersburg—Electric-light Plant.—The city council has passed an ordinance providing for the lighting of the streets with electricity. For information address the mayor.

Hagerstown—Publishing.—The syndicate noted last week as having been organized to purchase the Hagerstown News has completed the purchase. Philip W. Avirett, of Cumberland, Md., is editor and manager; J. W. Humbird, of Cumberland, vice-president, and H. S. Benson, of Laurel, Md., secretary.

New Warsaw (P. O. Baltimore)—Gas Range Works.—The New Warsaw Land & Industrial Co. (office, 210 North Calvert street, Baltimore) has closed a deal with the T. C. De Prenay Gas Range Manufacturing Co., of Washington, D. C., for a tract of land at New Warsaw, on Back river, for \$5000. The latter company will erect a large manufacturing plant to employ from 250 to 300 men.

Owings Mills—Electric-power Plant.—The Pikesville, Reisterstown & Emory Grove Electric Railway will build an electric-power plant. For information address Henry A. Parr, president, Baltimore.

Thurmont (P. O. and former name Mechanics-town)—Signal Works.—The American Signal Co., noted during the week, has its office at No. 10 East Lexington street, Baltimore; Geo. W. Smith, general manager. The company manufactures an electric railway signal.

Washington, D. C.—Publishing, etc.—A charter has been granted to the Washington Times Publishing Co. with a capital stock of \$50,000 to publish a daily and weekly newspaper and conduct

printing works. Louis A. Shimpf, W. W. Rockwell, Paul T. Bowen, James K. Patten, Henry Speake, Orlando S. Montz and others are the incorporators.

Washington, D. C.—Gas Plant.—A bill has been introduced in Congress to incorporate the National Gas & Electric Light & Heat Co., with a capital stock not to exceed \$200,000, for the purpose of erecting a gas plant, laying mains, etc. The incorporators named are W. F. M. McCarty, of Hagerstown, Md.; S. Sterrett McKim, of Baltimore; Davies Murdoch, of Baltimore; Jno. E. Chamberlain, Jno. W. Childers and others.

MISSISSIPPI.

Biloxi—Telephone Exchange.—The Biloxi Electric Light Co. intends to construct a telephone exchange, and E. G. Burlin, manager, has gone North to purchase the necessary equipment.

West Point—Foundry and Machine Shops.—Whipple & Beil, late of La Crosse, Wis., have located in West Point, and established foundry and machine shops. More new machinery will soon be put in.

West Point—Box and Lumber Mills.—The Evans Manufacturing Co. has been organized, and will erect a plant for the manufacture of boxes, shooks, hardwood lumber, etc. J. D. Evans is at the head of the concern.

West Point—Lumber Mill.—J. H. McCord will at once erect the hardwood lumber mill lately reported, and has already booked orders for several hundred thousand feet. All machinery needed has been purchased.

MISSOURI.

Brunswick—Electric-light and Water Works.—Percy C. Barney, engineer, of Chillicothe, Mo., is preparing plans and specifications for an electric-light plant and system of water works proposed for Brunswick.

Concordia—Cannery.—Henry Fiene, Wm. H. Bruns, F. D. Meyers and others have incorporated the Concordia Canning Co. with a capital stock of \$12,000.

Hughesville—Mercantile.—John R. Gentry, Emmett B. McClure and Henry D. Shelton have incorporated the Hughesville Mercantile Co. with a capital stock of \$5,000.

Joplin—Oilcloth Factory.—The Welch-Sutton Paint Co. has lately started the manufacture of oilcloth, and the latest machinery has been installed for the purpose.

Kansas City—Bakery.—Henry Petz, Louisa Fuchs and Herman Gimler have incorporated the Fuchs Baking Co. with a capital stock of \$10,000.

Kansas City—Transfer Company.—William S. Gilbert, Fred. S. Doggett and William R. Nelson have incorporated the Depot Carriage & Baggage Co. with a capital stock of \$25,000.

Kirkville—Water Works.—A direct-pressure system of water works will be constructed. Plans and specifications are about ready. About four and a half miles of mains will be laid. Address Stephen Hall, city engineer.

St. Joseph—Mantels.—R. T. and Margaret Connell and J. C. Calhoun have incorporated the Connell-Calhoun Mantel Co. with a capital stock of \$20,000.

Neosho—Increase Capital.—The Neosho Prospecting Co. has increased its capital stock from \$2000 to \$5,000.

St. Louis—Increase Capital.—The Stupp Bros. Bridge & Iron Co. has increased its capital stock from \$24,000 to \$50,000.

St. Louis—Iron, etc.—Joseph Marks, L. Manne and Julius Berger have incorporated the J. Berger Iron & Metal Co. with a capital stock of \$4,000.

St. Louis—Increase Capital.—The Pickel Marble & Granite Co. has increased its capital stock from \$75,000 to \$125,000.

St. Louis—Manufacturing.—B. Wilde, Clement C. Carpenter, Thos. B. Crews, Fred. H. Rogers and Mary E. Rogers have incorporated the Ideal Manufacturing Co. with a capital stock of \$50,000.

NORTH CAROLINA.

Albemarle—Cotton Mill Proposed.—John A. Blackwelder, of Concord, was in Albemarle lately endeavoring to interest the citizens in the erection of a cotton mill.

Burlington—Cotton Mill Enlarging.—The Aurora Cotton Mills will enlarge its buildings.

Charlotte—Gold Mine.—R. M. Miller, Sr., and Thomas Grier contemplate purchasing the Surface Hill gold mine, and if they do so, developments will be actively pushed.

Charlotte—Broom Factory.—The Mecklenburg Broom Works and the Charlotte Broom Factory, both recently established, have consolidated under the latter name. Enlargements will shortly be made.

Charlotte—Dye Works.—Charles Strickrodt and Otto Zimmerly have established the Charlotte Dye Works.

Charlotte—Repair Shop.—The D. A. Tompkins Co. has completed the equipment of a shop for making general cotton-mill repairs.

Charlotte—Horseshoe Works.—Dr. C. D. Smith,

who recently established horseshoe works, will enlarge his facilities.

Gold Hill—Gold Mines.—The Beam Gold Mining Co. intends to put up a pump and sink under water level at its gold mines and mine on a larger scale; A. H. Graf, superintendent; principal office, 308 Ogden street, Newark, N. J.

Greenville—Tobacco Factory.—The contract for the erection of a leaf-tobacco factory for the American Tobacco Co. has been signed. The building will be four stories high, 40x140 feet, and when completed will reorder about 1,500,000 pounds.

Hamilton—Saw Mill.—G. E. Brown intends to erect a saw mill of 10,000 or 15,000 feet of lumber capacity daily.*

Henderson—Pants Factory.—S. D. Young contemplates starting a pants factory.*

McAdenville—Mill Enlarging.—The McAden Mills, cotton manufacturer, will enlarge its plant.

Raleigh—Iron Works, etc.—New shops will be built for the forges, iron and woodworking departments of the Agricultural and Mechanical College. Address W. S. Primrose, chairman.

Tarboro—Water Works.—The Tarboro Water Works Co., which has contract to construct water works, will probably soon commence work on the plant and finish it within a year. H. Hungerford, the company's agent, was in Tarboro last week and published a notice to the above effect.

Winston—Tobacco Works.—Kerner Bros. have put in their tobacco works a complete outfit of improved machinery. Their plant has a capacity of 700,000 pounds of plug tobacco.

SOUTH CAROLINA.

Gaffney City—Roller Shops.—John Gregory has lately started shops for covering cotton-mill rollers.

Florence—Printing Works.—A charter has been granted to the Southern Publishing Co., of Florence, with headquarters at Charleston. The company proposes to conduct a general printing business, and its capital stock will be \$10,000, with privilege of increasing to \$50,000.

Spartanburg—Iron Works.—D. S. H. Harris, W. A. Harris, William Fowler, L. C. Cannon, John B. Cleveland and D. R. Duncan have incorporated the Harris Automatic Air Brake Coupler Co. to manufacture and sell a patented air brake and car coupler. The capital stock is to be \$1,000,000.

TENNESSEE.

Blue Spring Station—Lead and Zinc Mines.—The Tennessee Lead Mining Co., of Cleveland, Tenn., will develop the new lead and zinc deposits near Blue Springs, noted last week. All the machinery needed has been purchased.

Bradford—Mercantile.—T. D. Bryant, E. Greer, L. W. Cash, J. G. Butler and J. N. Rochelle have incorporated the Bradford Stock Co. to transact a merchandise business.

Bristol—Furniture Factory.—P. V. & B. J. S. McLean have started the manufacture of furniture.*

Chattanooga—Land Company.—D. S. Robertson, G. H. Cowdery, C. H. Munger, N. L. Cooke and others have incorporated the Mission Ridge Park Land Co.

Chattanooga—Telegraph Line.—The Postal Telegraph Co. will extend its line to Knoxville.

Clarksville—Electric-lighting.—A special meeting of the stockholders of the Clarksville Electric Light Co. has been called for the purpose of arranging for liquidation.

Helenwood—Coal Mine.—J. H. Pemberton will open a coal mine near Helenwood.

Humboldt—Water Works.—The construction of a system of water works by the city has been definitely decided upon. Address C. H. Ferrell, of the water committee.

Jackson—Canning Factory.—A large cannery has recently been established through the efforts of the Jackson Board of Trade.

Jackson—Cotton Mill.—A New York party is making inquiries relative to the establishment of a cotton-batting factory in Jackson. R. S. Fletcher can probably give information.

Knoxville—Canning Factory.—The Marine City Business League will endeavor to secure the establishment of a canning factory. E. P. Fearn, Fred Roberts and Jno. Rane have been appointed a committee to solicit subscriptions.

Lenoir City—Car Works.—The Lenoir Car Works are rapidly nearing completion, and will probably be put in operation at an early date. The car-wheel works to be operated in connection with the above plant are owned by J. M. Bass, of Fort Wayne, Ind., and are to start operating very soon.

Memphis—Barrel Factory.—The Mousch-Dozier Barrel Co., of Louisville, Ky., is reported as having decided to remove its plant to Memphis.

Memphis—Car Works.—Contracts have been let for the shops of the Memphis Car & Foundry Co. which has recently been reported more fully.

South Pittsburg—Machine Works.—T. R. Hackworth & Co. are now forming a company to manufacture their patent hay press.*

TEXAS.

Angelina County—Saw Mill.—T. T. L. Lane is building a saw mill in Angelina county.

Beaumont—Land Improvement, etc.—D. A. Bibb, C. L. Nash, Geo. W. Carroll, Thomas H. Langham, L. P. Ogden, W. B. Dunlap and others have formed the Jefferson County Land, Loan & Irrigation Co. to buy and improve land, etc. The capital stock is \$250,000 in shares of \$100 each.

Beaumont—New Machinery.—The Beaumont Lumber Co. has put in its mill a new finishing machine.

Burke—Lumber Mills.—E. S. Hicks, M. L. Brown and T. E. Whistruant have incorporated the Neches Lumber Co. with a capital stock of \$10,000.

Clifton—Flour Mill.—W. S. Helm & Co. will erect a flour mill; nearly all machinery has been purchased.*

Dallas—Cistern Factory.—Eidelbach & Son, of Flatonia, manufacturers of cisterns, will open a branch in Dallas.

Fort Worth.—Zeno C. Ross, F. O. Barron, James L. Norton and Thomas D. Ross have incorporated the Fort Worth Improved Freehold Co. with a capital stock of \$10,000.

Galveston—Wharf Improvements.—The Galveston Wharf Co. will expend \$15,000, and probably more, in wharf improvements at the site of the proposed new compress.

Groveton—Canning Factory.—The erection of a canning factory is contemplated.

Hearne—Cotton Compress.—A report says that a cotton compress will be built.

Hillsboro—Electric Plant, etc.—A. T. Rose, H. T. Ivy, E. G. Shields and others have incorporated the Hillsboro Investment & Electric Co. for the purpose of supplying light, heat and electric motive power, etc. The capital stock is placed at \$50,000.

Houston—Can Works.—The company organized several weeks ago to manufacture the Garland oil can is known as the Texas Can Co. G. W. Heyer, E. K. Dillingham and L. J. Parks are interested.

Houston—Can Works.—The company organized several weeks ago to manufacture the Garland oil can is known as the Texas Can Co., and has been incorporated by G. W. Heyer, E. K. Dillingham, E. Muegge, J. E. Hirschfeld and L. J. Parks; capital stock is placed at \$10,000.

Palestine—Water Works.—A franchise for water works has been granted to Jno. J. Donovan and others, of Lowell, Mass., under certain conditions, which will probably be accepted. W. C. Campbell, city secretary.

Pearsall—New Machinery.—Beever & Hindes are putting new machinery in their cotton gin.

Pearsall—Artesian Well.—E. U. Cook will sink an artesian well.

Phelps—Saw Mill.—C. D. Oliphant has started a saw mill near Phelps.

Velasco—Grain Elevator.—The organization of a company to erect a 500,000 bushel grain elevator to handle export grain is talked of. For information address the Velasco Export Commission Co.

Waco—Cotton Ginnery.—Paine, Chatham & Co. will erect a cotton ginnery, and it is said that they have let contract to the Bessonet Compress Co.

Waco—Compress and Gin.—S. I. Munger, of Dallas, writes us that there is no truth in the report noted last week that he is arranging with the Bessonet Compress Co. to erect a gin and compress in Waco.

Yoakum—Oil Mill.—The directors of the Yoakum Oil Mill Co., at a meeting held last week, secured sufficient subscriptions to complete the cotton-seed-oil mill.

VIRGINIA.

Alexandria—Brick Works.—Rouse & Pohl's new brick works have been completed and are now in operation, employing twenty-five men.

Almond—Flour Mill.—Shaver & Lenoir contemplate changing their flour mill to the roller process.

Big Stone Gap—Canning Factory.—Goodloe Bros. are preparing to establish a canning factory.

Big Stone Gap—Cigar Factory.—Goodloe Bros. will establish a cigar factory.

Fredericksburg—Enlarging Pickling Establishment.—Alart & McGuire will erect a two-story, 125x50 foot addition to their pickling establishment and make other improvements.

Fredericksburg—Shoe Factory.—The Eagle Shoe Factory is making some improvements to its plant and will resume operations on May 1.

Graham—Tannery.—For information regarding the talked-of tannery, noted last week, address L. C. Tabb, of Bluefield, W. Va., agent of the Graham Land & Improvement Co. Harrisburg (Pa.) parties contemplate the plant.

Keysville—Gold Mines.—Wm. T. Riggs, of Washington, D. C., and his associates expect soon to develop the recently-discovered gold deposits near Keysville.

Norfolk—Construction.—A charter has been granted to the Norfolk & Newport News Con-

struction Co. with a maximum capital stock of \$25,000. D. S. Baum is president.

Norfolk—Publishing.—A charter has been granted to the Norfolk Printing & Publishing Co. to publish a newspaper for the advancement of the colored race. J. C. Asbury is president.

Norton—Coal Mines.—The Norton Land & Improvement Co.'s coal mines, which have been idle for some time, resumed operations last week at full capacity.

Richmond—Furniture Factory.—A Pennsylvania party was in Richmond last week talking of erecting a furniture factory.

Richmond—Woodenware Factory.—A charter has been granted to the Richmond Woodenware Manufacturing Co. to manufacture building supplies and domestic utensils, with a capital stock of not less than \$10,000 nor more \$50,000. John T. Terrell is president; J. Q. Dickerson, vice-president and general manager; C. W. Honiger, secretary and treasurer.

Roanoke—Harness Factory.—A new company has been organized for the purpose of manufacturing harness, and an equipment of machinery will be purchased and put in at once. A. S. Hughes is manager.

Roanoke—Metal Company.—The Roanoke Metal Co. has been chartered with a maximum capital stock of \$5000. James S. Groves is president, and S. J. Kennedy, secretary-treasurer.

Staunton—Roofing Works.—The Shenandoah Steel Roofing Co., of Woodstock, Va., contemplates establishing works in Staunton. Address B. E. Sager, secretary.

Suffolk—Iron Foundry.—Howard Onslow, of Norfolk, is said to contemplate establishing an iron foundry in Suffolk.

Suffolk—Telephone System.—The proposed telephone system, lately noted, will be constructed by the Nansemond Telephone Co., organized with J. H. Macleavy, president, and B. B. Dumville, secretary-treasurer. L. P. Harper, W. N. McAnge, H. E. Elam and others are the directors.

Trinity—Stave Factory.—W. G. Spigle will put in machinery for manufacturing 12,000 staves daily.

Virginia—Asbestos Mine.—The American Asbestos Mining Co., of 134 Massachusetts avenue, Indianapolis, Ind., will probably develop asbestos mines in Virginia. No machinery purchased yet.

Whaleville—Electric-light Plant.—The Jackson Bros. Co. is adding an electric plant to light its mill and yards.

Whaleville—Lumber-mill Improvements.—The Jackson Bros. Co. writes that order has recently been placed for electric-light plant for its lumber mill. The eight dry-kilns lately noted are in course of erection, and the mill itself will be improved with new machinery, and in a few weeks a new boiler-house will be built. The company has placed orders for four boilers, sixty inches by sixteen feet, to supply steam for the eight Champion dry-kilns. This new building will be 42x62 feet, and one end of the building will be partitioned off for the electric-light plant, which will consist of 15-kilowatt incandescent dynamo, having capacity of 270 sixteen candle-power lamps, which will be driven by one of the J. H. McEwen Manufacturing Co.'s engines.

WEST VIRGINIA.

Charleston—Coal Mining.—A charter has been granted to the Big Mountain Mining Co. with a capital stock of \$200,000. The incorporators are George S. Couch, Neil Robinson and E. B. Knight, of Charleston, and J. G. W. Tompkins and Amelia Tompkins, of Cedar Grove, W. Va.

Clarksburg—Oil Company.—A charter has been granted to the Home Oil Co. with an authorized capital of \$1,000,000.

Fairmont—Glass Works.—The Fairmont Bottle Works was sold at commissioner's sale on the 13th inst., and was bid in by the Fairmont Development Co. The price paid was \$11,147, about one-third the original cost of the plant.

Harman—Carding Mill.—Solomon Carr has put in his mill an equipment of carding machinery. The plant is located two and a-half miles from Harman.

Hinton—Plating Works.—Mustain & Hinton have purchased machinery and will equip plating works.

Huntington—Machinery, etc.—T. Bryant and W. R. Thompson, of Huntington, W. Va.; C. H. Smith, of Richmond, Va.; A. M. Hobson, of Ansted, W. Va., and Randolph Braub, of Flatbush, W. Va., have incorporated the Smith-Hobson-Braub Co. to deal in machinery and general supplies for mines, furnaces, etc. The authorized capital is \$100,000.

Piedmont—Furniture Factory, etc.—The erection of a furniture factory and a tannery has been proposed. J. S. Jamesson can probably give information.

Point Pleasant—Water Works.—Pollock & White, of Wheeling, have contract to construct water works in Point Pleasant. Work on same is to commence within ninety days and be completed in six months.

Shepherdstown—Bicycle Works.—R. G. Surbridge,

of Hagerstown, Md., is equipping a plant at Shepherdstown for the manufacture of bicycles.

Sistersville-Sewer System.—Miller & Chersell, of Martin's Ferry, Ohio, will prepare plans for the city's proposed sewer system. G. B. Slemaker, city clerk.

Terra Alta-Tannery.—It is said that representatives of W. S. Cobb & Co., of Boston, Mass., were in Terra Alta last week looking for a site for a tannery.

West Virginia-Saw Mills, etc.—The Mountain Lake Lumber Co., reported last week as incorporated, has purchased 26,000 acres of land in West Virginia, and will build a railroad and erect saw mills for developing same. Address the president, John Sweet, Monon Block, Chicago, Ill.

BURNED.

Acree, Ga.—J. T. Mayo's saw mill.

Ashland, Va.—Taylor's livery stable and Levy's storehouse.

Atlanta, Ga.—The F. W. Hart Sash & Door Co.'s mill; loss from \$15,000 to \$18,000.

Baton Rouge, La.—John T. Smith's sash, door and blind factory; loss about \$50,000.

Biloxi, Miss.—The Biloxi Electric Light Co.'s plant was damaged to the extent of \$2000 by lightning destroying a dynamo.

Chesterfield, Va.—Alpheus Homer's saw mill, near Chesterfield.

Fort Mill, S. C.—T. G. Culp's saw mill.

Glen Alpine, N. C.—J. D. Pitts's corn, planing, saw and shingle mill.

Grenada, Miss.—Chamberlin House, owned by the Illinois Central Railroad Co. (office, Chicago).

Hempstead, Texas.—Stores of George Schwartz, N. B. Pointer and F. R. Hammond; loss \$12,000.

Lula, Ga.—Joel Coffee's cotton gins, etc.

New Orleans, La.—George Dunbar, Sons & Co.'s canning factory.

Palestine, Texas.—Aiken & Boyle's dry-goods store; loss \$10,000.

St. Louis, Mo.—The Crown Linseed Oil Works; loss about \$400,000; fully covered by insurance.

St. Louis, Mo.—Grain elevator of the Ryan Commission Co.

BUILDING NOTES.

Albany, Ga.—Dwelling-house.—David Brown intends to build a dwelling-house.

Alexandria, Va.—Dwellings.—Wheat & Sutar will erect two large brick dwellings in the suburbs.

Ash Grove, Mo.—Storehouses.—The Searcy Drug Co., D. S. Maits and Carlock & Rountree will rebuild their storehouses recently destroyed by fire.

Baltimore, Md.—Dwellings.—O. F. Bresce will erect four three-story brick dwellings on St. Paul street.

Baltimore, Md.—John Waters has permission to build two three-story brick dwellings on St. Paul street.

Baltimore, Md.—Church.—The congregation of Otterbein United Brethren Church has decided to build a new edifice. Address Rev. August Smith.

Baltimore, Md.—Church.—Funds are being raised to build a new church by the North Avenue Methodist congregation.

Baltimore, Md.—Dwellings.—Peter Harecki will build nine two-story brick dwellings for tenements.

Baltimore, Md.—Charles H. Gerwig will erect seven three-story brick dwellings on Calvert street.

Basic City, Va.—A. Shaver & Son will build a two-story business house.

Baton Rouge, La.—Federal Building.—It is stated that the supervising architect at Washington will soon want bids for constructing the proposed federal building.

Birmingham, Ala.—Asylum.—The State Grand Lodge, Knights of Pythias, has decided to build an asylum for widows and orphans to cost \$50,000. A. S. Hirscher is interested.

Charlotte, N. C.—Church.—The congregation of the First Presbyterian Church will probably remodel their church. Address the pastor.

Christiansburg, Va.—College Addition.—Contracts have been partly let for the addition to Blacksburg College. Six dwellings for professors are to be built. Address President McBride.

Clarksburg, W. Va.—A three-story office and store building will be erected. T. M. Jackson can give particulars.

Columbus, Ga.—Hospital.—Lockwood Bros. are architects for the hospital which it is proposed to erect in Columbus.

Cuero, Texas.—Courthouse.—The county commissioners are considering the idea of erecting a new courthouse.

Culpeper, Va.—Church.—The church recently destroyed by fire is to be rebuilt. Address Rev. E. W. Winfree.

Dalton, Ga.—The A. J. Showalter Co. is erecting a three-story brick business building.

El Paso, Texas.—Hotel.—It is reported that arrangements are being made to erect a three-story brick hotel. Address Alderman Stanton.

Fayetteville, W. Va.—Courthouse.—Murray Bros., of Wheeling, have been awarded contract for Fayette county's new courthouse at \$34,690. Franzheim & Giesey, of Wheeling, are the architects.

Galveston, Texas.—Church.—The congregation of Trinity Episcopal Church is considering the idea of erecting a new edifice. Address George Sealey.

Gilmer, Texas.—Church.—The Methodists contemplate building a church.

Greenville, N. C.—Warehouse.—E. A. Moye and Ola Forbes have awarded contract for a tobacco warehouse 50x100 feet.

Jackson, Miss.—School.—A school to cost \$10,000 is to be built. Address the mayor.

Jackson, Tenn.—Church.—A brick edifice will be built by the Hays Avenue Methodist Church. Rev. E. A. Hays is pastor.

Knoxville, Tenn.—College.—The plans of W. Chamberlin & Co. have been accepted for a \$300,000 college and dormitory for Knoxville College.

La Grange, Texas.—Church.—Mauer & Wesling have prepared plans for remodeling the edifice of the Methodist Episcopal church.

Lexington, Va.—Church.—Clarke & Poindexter have been awarded contract for stone work for the \$11,000 edifice to be built by the First Baptist Church. A. E. Jones has contract for the wood work. E. N. Bogher is the architect.

Lonoke, Ark.—Church.—Rickon & Thompson, Little Rock, will receive bids until May 1 for building a Baptist church at Lonoke.

Louisburg, N. C.—Hotel.—A three-story brick hotel will be built by W. T. Hughes, T. B. Wilder, J. E. Thomas and Hayes & Pinnel.

Macon, Ga.—Church.—Bids are wanted for constructing a church to cost \$15,000. Plans are now being prepared. Address Alonzo Monk.

Montgomery, Ala.—Dwelling.—Lockwood Bros., Columbus, Ga., will give information about an \$8000 dwelling to be built for J. S. Wilcox.

Mount Pleasant, Texas.—Hotel.—It is reported that plans are being prepared for a new hotel.

Mount Pleasant, Texas.—Theatre.—A project to build a theatre is being considered.

Nashville, Tenn.—School.—Bids are to be solicited to build a tower for Warner School to cost about \$8000. Address Chairman Stainback of the board of public works.

New Orleans, La.—Hotel.—Dr. J. J. Diet, of St. Charles avenue, has purchased the Ocean Club Hotel at Grand Isle, on the Gulf of Mexico, and, it is stated, will make extensive alterations and additions to it.

Norfolk, Va.—Church.—A site has been secured for a Catholic church which will be about 150x165 feet in size. Bishop Van de Vyver, at Richmond, may be addressed.

Nortonville, Ky.—Depot.—The Louisville & Nashville Railroad Co., office at Louisville, is to build a new depot at Nortonville.

Oglethorpe, Ga.—Wagner & Co., of Atlanta, have received the contract for building the courthouse to cost \$20,000.

Port Royal, S. C.—Dwellings.—The Port Royal Co. is reported as to build a number of dwellings.

Quanah, Texas.—School.—The contract for building the \$12,000 school will be let about June 15. J. J. Kane & Son, of Fort Worth, Texas, are architects.

Salisbury, N. C.—Warehouse.—The Salisbury Supply & Commission Co. is building a warehouse.

San Antonio, Texas.—Market.—Alderman Hice is raising a fund to build a market-house to cost \$50,000.

St. Louis, Mo.—Theatre.—It is stated that plans have been prepared for a theatre to be built on Olive street. Charles R. Pope, of New York, is interested.

RAILROAD CONSTRUCTION.

Railroads.

Baltimore, Md.—It is stated that contracts are about to be let for the Pikesville, Reisterstown & Emory Grove electric road, which is to be ten and a half miles long. J. G. White & Co. will probably do the work. Henry A. Parr is president of the company.

Beattysville, Ky.—It is stated that bondholders of the Richmond, Nicholasville, Irvine & Beattysville road will reorganize the company and extend it to Beattysville, thirty-six miles from the present terminus. John McLeod is receiver.

Bristol, Va.—The Holston Valley road being built by the Willey Boom & Lumber Co. will be extended to the Virginia State line. A. T. Smallney & Co., of Piney Flats, Tenn., are contractors.

Covington, La.—The East Louisiana Railroad Co. (office New Orleans) has, it is stated, arranged for funds to build its road to Pontotoc, Miss.

Dallas, Texas.—Edward Greer, of Oak Cliff,

Texas, and John W. Simpson, of Dallas, are among the incorporators of the Dallas & Oak Cliff Electric Railway Co., incorporated in Dallas.

Harrisonburg, Va.—The question of building an electric road to Bridgewater has been raised by business men of the two towns.

Henrietta, Texas.—It is stated that funds have been secured for building the first thirty miles of the Red River & Southwestern Railroad between Henrietta and Archer.

Hot Springs, Ark.—The Little Rock, Hot Springs & Texas Railway Co., has awarded contracts for grading its railroad from Hot Springs to Benton.

Muldoon, Texas.—Surveys are being made for an extension of the Missouri, Kansas & Texas road from Muldoon to Smithville.

Newberry, Fla.—Price & Thayer are building a tram-road.

Ocoee, Tenn.—Charles Livingston has been awarded contract to build a railroad from Ocoee to the Polk county mines.

Palestine, Texas.—The Palestine & Dallas Railroad Co., lately noted, has been chartered by George W. Burkitt, of Palestine; Hugh Burns, D. Murphy and A. A. Stevens, of Taylor; Joseph McSweeney, of Houston; A. W. Gregg, of Palestine, and others. The purpose is to build a railroad through the counties of Anderson, Henderson and Kaufman to Dallas. The capital stock is \$1,000,000.

Petersburg, Va.—Surveys have been made for the belt line to be built by the Petersburg Railway Co. for the Atlantic Coast Line. It will be about six miles long and probably include an iron bridge across the James river. The cost is estimated at between two and three hundred thousand dollars. E. T. D. Myers, of Richmond, can give particulars.

Savannah, Ga.—It is expected that the Savannah & Atlantic road will be in operation by May 1. It is practically completed.

Sparta, Ga.—Tracklaying will commence soon on the East & West Railroad between Sparta and Sandersville.

Washington, D. C.—Chief Engineer L. H. Hyer, of the Washington & Chesapeake Beach Railway Co., states that twenty-seven and a half miles of the road are being constructed; 800 feet of the pier at the bay terminus are completed, and arrangements are being made to bridge the Patuxent river. Coffin, Sullivan & Co. are contractors.

Street Railways.

Concord, N. C.—It is stated that Charleston (S. C.) parties are thinking of buying the Concord steam dummy line and converting it into an electric or cable road.

Little Rock, Ark.—S. W. Fordyce and A. N. Johnson, receivers of the City and Capital Street Railways, have been granted permission to construct a street railway along certain streets, using electric or other power.

New Orleans, La.—The work of rebuilding the lines of the New Orleans Traction Co. for electric motors is to be resumed, and that funds have been secured to complete it. James H. Maury is to be president of the company.

Opelika, Ala.—The Opelika & Auburn Electric Railway Co. is being organized by C. I. Daughtry, R. M. Greene, John L. Cowan and others to build an electric railroad from Opelika to Auburn. The capital stock will be \$40,000.

Portsmouth, Va.—The purchasers of the Portsmouth Street Railway have organized with L. R. Watts, president; H. L. Page, vice-president; Joseph L. Bilisoly, treasurer, and John L. Watson, secretary. Improvements will be made.

Washington, D. C.—The Woodbridge & Turner Engineering Co., Times Building, New York, states that it proposes to complete and have the Washington & Arlington electric road in operation in a few weeks.

Washington, D. C.—The House of Representatives has passed a bill requiring the Metropolitan Railroad Co. to equip its lines with an underground electric system within one year.

The new electric-light and power station for the Brush Electric Light Co. at Baltimore, Md., will be one of the finest in the Southern States. The boiler room is eighty-three feet wide by 129 feet long. The dynamo-room is 130 feet square; the floor space in the latter is entirely free from posts. The roofs are designed and built by the Berlin Iron Bridge Co., of East Berlin, Conn., and are made entirely of iron, covered with the company's patent anti-condensation corrugated iron roof covering.

The work of the tinplate mill of the Newcastle (Pa.) Steel & Tinplate Co. is an excellent indication of what can be done in making American tinplate. The governor of Pennsylvania recently visited the mill with several State officials. It is one of the largest and most complete plants in the country, and there are very few that equal it in Europe. From 350 to 400 men are employed, and the output of fine black plate is now said to be the largest in the country, and the demand is certainly increasing. Carloads are shipped every day to various parts of the United States, and recently the company has been shipping to Canada.

MACHINERY WANTED.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Implements.—Peter Adkins, Rock House, Ky., is in want of a mowing machine and rake complete. Quote cash price.

Baking-powder Machinery.—W. F. Watson, Greenville, S. C., wants machinery and supplies for the manufacture of highest grade baking powder.

Boilers.—Boilers will be wanted at Floral City, Fla. Address J. M. Baker.

Boiler and Engine.—John Meier, 18 East Morehead avenue, Charlotte, N. C., wants bids on a fifteen horse-power engine and a twenty horse-power boiler, either portable or separate (second-hand preferred).

Boiler and Engine.—See "water motor."

Boiler and Engines.—Joseph F. Smith, West Point, Va., wants prices on an eight to ten or twelve horse-power engine and boiler on skids or wheels; also will want a twelve or fifteen horse-power second-hand engine.

Building Material.—David Brown, Albany, Ga., wants to correspond with manufacturers and dealers in sash, doors, blinds, builders' hardware, plumbing supplies, etc.

Cars.—The Rock Falls Manufacturing Co., Sterling, Ill., wants two second-hand standard-gage box cars.

Cement.—The Salisbury Supply & Commission Co., Salisbury, N. C., wants to correspond with dealers in cement.

Chewing-gum Machinery.—F. L. Meares, Wilmington, N. C., wants to correspond with manufacturers of chewing-gum machinery.

Clothing Machinery, etc.—S. D. Young, Henderson, N. C., wants to buy machinery and material for the manufacture of pants.

Conveying and Elevating Plant.—Second-hand Hunt system wanted for loading and unloading vessels and conveying material by cars and elevated truck in and out of factory; want hoisting engine, motor, 1200-foot truck, scales, switches, etc. Address P. O. Box 422, Richmond, Va.

Cotton-mill Goods.—The Raymond Bag Co., Richmond, Va., wants to correspond with Southern manufacturers of standard sheeting, print cloths and seamless bags.

Dynamo.—W. F. Watson, Greenville, S. C., wants a small dynamo for lighting; second-hand, if in good condition.

Elevating Machinery.—W. S. Helm & Co., Clifton, Texas, will buy elevator for flour mill.

Engine.—The Hecla Coal Co., Earlington, Ky., wants to buy a sixteen horse-power engine to operate coal screens.

Engine.—W. N. McMillan, Buckholts, Texas, wants a fifty-five horse-power engine.

Engines.—Saxon A. Anderson, Marietta, Ga., will purchase rag engines.

Feed-mill Machinery.—The Advance Gin & Mill Co., Vicksburg, Miss., wants to correspond with manufacturers of machinery for complete feed mills.

Fire Equipment.—A hook-and-ladder company has been organized at Winchester, Va., and will want fire apparatus. Address Lewis U. Barton, treasurer.

Four-Mill Machinery.—James R. Womble, Richmond, N. C., wants prices on roller-mill machinery.

Gas Engine.—X, 916, Sun Office, Baltimore, Md., wants a twelve to fifteen horse-power gas engine in good order.

Hoisting Engine.—See "conveying and elevating plant."

Hose.—W. E. Jenkins, Box 81, Pocahontas, Va., wants to buy about 150 or 200 feet of three-quarter-inch rubber hose.

Hosiery Machinery.—The Southern Hosiery Co., Tallapoosa, Ga., wants rib frames, sewing machines, round frames, etc.

Lathe.—Williams, P. O. Box 835, Baltimore, Md., wants a screw-cutting lathe; hollow spindle preferred.

Lathe.—J. D. Halliwell, Fancy Hill, Ark., will want a turning lathe.

Lathe.—G. W. Stubbs, Milledgeville, Ga., wants

to buy second-hand engine lathe with screw-cutting gear, 12-inch swing by 10-foot bed.

Leather.—R. H. Lanyon, Chase City, Va., wants prices on all kinds of leather for the manufacture of shoes, such as dongola, kid, gaiter tops, morocco, oak, etc.

Lime-kilns.—The Salisbury Supply & Commission Co., Salisbury, N. C., wants to correspond with lime-kiln builders.

Lime Manufacturers.—Frank Starr, New Orleans, La., wants to correspond with manufacturers of lime.

Machine Tools, etc.—T. R. Hackworth & Co., South Pittsburg, Tenn., will buy a drill press, machine for casting four-and-a-half-inch pinion, machine to turn four-and-a-half-inch pinion, set of forge tools, with blower, etc.

Machine Tools.—The Camden Foundry & Machine Co., Camden, Ark., will probably want a few machine tools.

Mining Plant.—Some Florida parties are in the market for machinery for mining pebble phosphate. Address F. M. Stansbrough, Bartow, Fla.

Motor.—See "conveying and elevating plant."

Paper for Cigarettes.—The Michie Tobacco Co., Henderson, N. C., wants to correspond with manufacturers of cigarette paper.

Paper-mill Machinery, etc.—Saxon A. Anderson, Marietta, Ga., will purchase rags, cutters and dusters for paper mill.

Piping.—Piping will be wanted at Floral City, Fla. Address J. M. Baker.

Piping, etc.—J. M. Carter, Abilene, Texas, wants thirty-five tons of 6-inch, ten tons of 8-inch and 4000 feet of 4-inch mains, hydrants, valves, etc.

Pulleys, etc.—The Camden Foundry & Machine Co., Camden, Ark., will want pulleys, shafting, boxes, etc.

Pump.—The Wheeling Park Association, Wheeling, W. Va., will likely need a pump for artesian well.

Pump.—J. M. Carter, Abilene, Texas, wants a dry well pump of 100,000 gallons capacity per twenty-four hours.

Pumping Machinery.—A. H. Martine, superintendent of the Middlesborough Water Co., Middlesborough, Ky., is investigating pumping machinery. Builders of machinery in this line might find it of interest to correspond.

Pumps.—Pumps will be wanted at Floral City, Fla. Address J. M. Baker.

Rails.—The Virginia Soapstone Co., Schuyler, Va., wants about 250 feet of light strap iron (second-hand) about two or two and a-half inches wide for a light tram-road.

Roofing.—The Camden Foundry & Machine Co., Camden, Ark., will probably want iron roofing.

Rubber Hose.—Bids are invited until May 10 for 1000 feet of rubber fire hose, two and a-half inches, with Feyh's couplings. Address H. B. Muff, Shreveport, La.

Saw.—T. R. Hackworth & Co., South Pittsburg, Tenn., will buy a band saw.

Saw Mill.—J. D. Hallifield, Fancy Hill, Ark., wants to buy a saw mill.

Saw Mill.—G. E. Brown, Hamilton, N. C., wants to buy a double circular-saw mill of 10,000 to 15,000 feet daily capacity, with all the latest improvements.

Saw.—J. W. Boike, Cullman, Ala., wants a 36-inch inserted-tooth saw.

Sewing Machine.—R. H. Lanyon, Chase City, Va., wants prices on a No. 12 Wheeler & Wilson machine for leather work, with table for foot-power.

Siding.—W. S. Helm & Co., Clifton, Texas, will buy siding.

Stave Machine.—W. G. Spigle, Trinity, Va., is in the market for a stave machine of 12,000 capacity daily.

Summer Fan.—S. A. Denyer, Thibodeaux, La., wants a summer fan, rotary preferred; would like the power to be on the clock-spring principle.

Telephone Equipment.—The Citizens' Telephone Co., Cumberland, Md., is ready to correspond with firms supplying telephone equipment. Address John T. Edwards, secretary.

Water Motor.—W. F. Watson, Greenville, S. C., wants one-quarter of a horse-power water motor (for 50 pound pressure) to drive dynamo, or would buy boiler and engine, gas or oil, if offered cheap.

Wheelbarrows.—The H. Stevens Sons Co., Macon, Ga., wants prices on iron wheelbarrows.

Woodworking Machinery.—T. R. Hackworth & Co., South Pittsburg, Tenn., will buy a surface planer and an auger machine.

Woodworking Machinery.—James R. Womble, Richmond, N. C., wants prices on a new planing machine, and wants to buy a pony planer.

Woodworking Machinery.—McLean Bros., Bristol, Tenn., want prices on planer, 24-inch sander, dado machine, carving machine, bed-lock machine and machine for scroll carving, new and second-hand.

Woodworking Machinery.—The Bedford Handle & Hardware Co., Bedford, Pa., wants machinery for manufacturing meat skewers.

Woolen Mill Machinery.—W. H. Gibbs, Jr., & Co., Columbia, S. C., want a machine for taking burrs out of wool.

Church Furniture, etc.—Alonzo Monk, Macon, Ga., wants prices on pews to seat 1000 people, 600 school chairs, steel ceilings and stained glass for church to cost \$15,000.

Hotel Needed.—There is great need for a large first class hotel just north of the city limits of Baltimore. That section is rapidly developing; it is in the line of the finest residence growth; it is elevated above the city, and all conditions are ideal for a large hotel. A large property-owner desires to secure the co-operation of a hotel manager with some capital, or general investors, for the purpose of organizing a company to build such a hotel. It is an unusually attractive opportunity. Address R. P., care editor MANUFACTURERS' RECORD, Baltimore.

School Furniture, etc.—W. D. Wagner, Quanah, Texas, will buy furniture and supplies for a school to cost \$12,000.

Edw. Deibert & Bros., of Elkton, Md., wants to contract for merchantable Georgia yellow-pine lumber delivered at Elkton. They want lumber 3x7½ and 3½x7½ and twenty-five to forty-five feet long, dressed on both edges and one side or both sides, pieces 8x12 and thirty-six to fifty feet long and 12x12 and thirty-six to fifty feet long in the rough, 3x12 to twelve and twenty-five to forty feet long in the rough, about 3000 to 16,000 feet at a time.

TRADE NOTES.

THE asbestos roofing of the H. W. Johns Manufacturing Co. has been on the market for thirty-six years, and its sale has constantly increased.

THE equipment of machinery for H. F. L. Rummel & Co.'s new lumber mill at Neelyville, Mo., will be furnished by the Filer & Howell Co., of Milwaukee, Wis.

MR. JNO C. N. GUBERT, of New York city, sole owner and manufacturer of the "swinging hose rack," has changed his office location from No. 115 Broadway to Room 107, Taylor Building, No. 39 Cortlandt street.

BUSINESS in the canning machinery line is very active this spring, according to a report from Messrs. G. A. Crosby & Co., of Chicago, Ill., who manufacture that class of apparatus, besides presses, dies and special machinery. Crosby & Co. say that they are literally overrun with work.

A COAL-MINING company having its property located on the Norfolk & Western Railroad, and now in successful operation, is offering in our advertising columns an excellent opportunity for investment. It is desired to obtain \$10,000 for the purpose of enlarging operations, and a full investigation is courted.

THE White & Middleton Gas Engine Co., of Baltimore, has put one of its sixty actual horse-power gas engines in the new factory of the Woodbridge Fertilizer Co., of this city. The Woodbridge Company had used prior to this a seven horse-power, ten horse-power and twenty-five horse-power engine made by White & Middleton.

THE Walton & Whann Co., of Wilmington, Del., has lately placed in its works, to run in connection with a Sturtevant mill, Sturtevant rock emery stones for grinding pebble phosphate rock. These emery millstones are built by the Sturtevant Mill Co., of Boston, and the makers claim them to be the only process that will successfully grind this kind of phosphate rock.

CORTLAND, N. Y., recently awarded contract for a steel-frame city hook and-ladder truck to the Gleason & Bailey Manufacturing Co., of Seneca Falls, N. Y. Garfield, N. J., has just received its Gleason & Bailey hook and-ladder truck. H. K. Barnes & Co., of Boston, also have an order from St. Johnsbury, Vt., for a Gleason & Bailey steel-frame hook and-ladder truck.

THE government authorities at the United States navy yard, Washington, D. C., after subjecting chrome steel to severe tests, say in a letter to the manufacturers, the Chrome Steel Works, of Brooklyn, N. Y.: "It will do from three to four times more work in all the various kinds of tools than carbon steel will." This is a quality of much value to makers of fine tools, and worthy of remembrance.

THE Cleburne Foundry & Machine Co., of Cleburne, Texas, has put on the market the Clarkson pump, a new invention patented in April, 1893. This pump is reported to be very simple, strong, durable, economical and effective. It is especially designed to meet the needs of cotton-ginners. Mr. William Clarkson, the inventor, is manager of the company, which carries on a general foundry and machine business.

CONTRACTS for furnishing elevator enclosure for the five-story building of the San Antonio Brewing Association, of San Antonio, Texas; with the Alamo Foundry Co., of San Antonio, for fitting up large stable with stall guards, hay racks and feed mangers, and for furnishing wire

guards for the new addition to the insane asylum at Raleigh, N. C., have all been secured by the Dow Wire Works Co., of Louisville, Ky.

THE Sturtevant Mill Co., of Boston, Mass., has just equipped the Joseph Wharton American Nickel Works, at Camden, N. J., with a Sturtevant crushing plant for grinding nickel ore. The Orford Copper Co., at Constable Hook, N. J., the only other company grinding nickel ore in this country, is also equipped with these giant crushers, and the Sturtevant Company can thus claim a monopoly of this particular part of ore-grinding.

"OUR grip sockets are selling faster than we can make them," is what the Cleveland Twist Drill Co., of Cleveland, Ohio, writes us. The company has just furnished the United States government at its Washington navy-yard six of each size from No. 1 to No. 5, inclusive, making thirty sockets in all. As the naval officials only adopt new devices after careful investigation, this order speaks well for the merits of the Cleveland grip socket.

THE new Slater Engine Co., of Warren, Mass., reports business prospects as improved. Several large contracts for its make of engines have been closed in the past two weeks, among them a 150 horse power for the Pope's Island Manufacturing Corporation, New Bedford, Mass., and a 100 horse-power for B. F. Perkins & Son, Holyoke, Mass. The concern is also building a 400 horse-power cross compound condensing engine for C. A. Stevens & Co., Ware, Mass.

THE Boston Belting Co., of No. 250, 258, 260 Devonshire street, Boston, Mass., has branch houses where its customers throughout the South can be supplied equally as well as at the home office. The following list is worth keeping for future reference: Baltimore, No. 26 Light street; Atlanta, Ga., No. 51 Decatur street; Mobile, Ala., No. 10-16 North Commerce and Front streets; New Orleans, No. 84 Canal street; Jacksonville, Fla., No. 2 Riverside avenue; St. Louis, Mo., Ninth street and Washington avenue.

"ONE of the largest manufacturers of steel and iron roofing in the world" is what the Chattanooga Steel Roofing Co., of Chattanooga, Tenn., claims to be. Its goods are being used extensively all through the South. A specialty is made of Crowl's patent standing seam steel roofing, which is a great favorite with the architects and builders wherever it is known, and wherever a first class metal roof is wanted. The company has also added galvanized iron work to its roofing business, so that it is now prepared to fit out any kind of buildings with roofing, siding, cornice, window caps, guttering, cresting, piping, etc. New illustrated catalogue of galvanized iron work is just out of press, and will be mailed to anyone applying for it.

THE American Supply Co., which has for some years had a large store at 10 Exchange Place, Providence, R. I., has leased a double store, 11 and 13 Eddy street, in that city, and has removed to it. This removal adds much more room for its business, besides adding greatly to its convenience. This company claims to be the largest manufacturer of loom harnesses in the country, and it is also a very large manufacturer of reeds, leather belting, etc., and has always sustained a high reputation on the goods which it manufactures, as well as those it keeps in stock. The officers of the company are: Treasurer, Myron Fish; secretary, John Carter—both of them gentlemen of large experience in their business. The manufacturers in New England and the South who favor it with their business are always sure of honorable dealings and of obtaining a high grade of goods.

STEDMAN'S FOUNDRY AND MACHINE WORKS, of Aurora, Ind., during the past month have sold and shipped the following orders for its pulverizing and grinding machinery: N. Ohlndt & Co., San Francisco, Cal., one 40-inch bone disintegrator, one bone crusher; Inter-State Fertilizer Co., Mt. Carmel, Ill., one 36-inch bone disintegrator, one bone crusher, one 40-inch by 10-foot revolving screen; Jackson Sand & Mining Co., Jackson, Ohio, one 40-inch sand disintegrator; Little Bros. Phosphate Works, Jacksonville, Fla., one 36 inch fertilizer disintegrator; Tennessee Coal, Iron & Railroad Co., Tracy City, Tenn., one 60-inch coal disintegrator, one pair 14-inch by 20-inch engines; Fire Creek Coal & Coke Co., Fire Creek, W. Va., one 44-inch coal disintegrator, one pair of 11-inch by 18-inch engines. It is claimed by the company that its crushing and grinding machinery is rapidly taking the lead in all fertilizer works, coal and coke operations, clay and sand works.

As an evidence that times are not so deplorable as they are said to be was the satisfactory meeting of the stockholders of the Joseph Dixon Crucible Co., held at its fine offices in Jersey City, N. J., April 16. Out of 7345 shares 7215 votes were cast for the same board of managers that has conducted the affairs of the company through its years of prosperity. The vote was the largest ever cast, and it was a decided compliment to the members of the board, as were also the remarks of some of the largest stockholders. The board

consists of E. F. C. Young, John A. Walker, Daniel T. Hoag, Richard Butler, William Murray, Joseph D. Bedle, Jerome D. Gillett. In the organization of the board Mr. E. F. C. Young was elected president; John A. Walker, vice-president and treasurer, and George E. Long, secretary. The Dixon Company was founded by Joseph Dixon in 1827 and organized as a stock company in 1868. Its manufactures are graphite products of all kinds, consisting of plumbago crucibles for melting gold, silver, brass, etc., blacklead retorts, stove polish, graphite for lubricating, electrotypers' graphite, graphite lead pencils, graphite paint and graphite prepared in hundreds of ways for as many different uses. Graphite is one of the principal forms of carbon. It is not affected by heat or cold, acids or alkalies, and is therefore one of the most useful materials known to modern industry when rightly prepared.

THE Winter's patent wharf drops have now obtained a reputation throughout the country for being the most efficient of anything ever designed for the purpose. They are used in ferry slips and on wharves for freight and passenger steamers at various points on the Atlantic and gulf coasts. The American Ship Windlass Co., of Providence, R. I., is the manufacturer, and it has furnished several at East La Moine, Bar Harbor and Portland, Me., and almost all the wharves in and around Boston are also fitted with these wharf drops. In New York city it has put on as many as forty two of these drops for a single concern. A short time ago we noticed that John H. Starin, who had tried these wharf drops at Glen Island for gang planks in connection with his excursion steamers, had lately adopted them for his large new wharves near the Battery in New York. These wharf drops can be seen at Philadelphia, on the wharf of the Wilmington Steamboat Co., and at other points in Pennsylvania and on the ferry slips owned by Thomas Pickles at New Orleans, who, having tried them on one slip, is about ordering others for other slips. These machines are as efficient in their way as all the different machines made by the American Ship Windlass Co. have proved themselves in actual use. They are very simple, very efficient and convenient, and extremely durable and very moderate in price. As its windlasses and capstans is acknowledged, even in Europe, to be superior to anything built there, so these wharf drops maintain the reputation of the company by being at the head of all arrangements for handling gang planks for any class of boats.

THE Penn Elevator Co., of Bloomsburg, Columbia county, Pa., with general offices and sales-rooms at 516 Commerce street, Philadelphia, started its new plant at Bloomsburg on the 2d inst. The company has recently erected and equipped a two-story brick building at that place, and is prepared to manufacture and install hydraulic and direct electric passenger elevators and steam, belt and hand-power elevators of every description, with automatic doors or gates. The location of the works affords good shipping facilities, being on the line of the Delaware, Lackawanna & Western Railroad and near to the Philadelphia & Reading and Pennsylvania Railroads and a canal running to Baltimore. The ground floor of the main building contains the machine shop, 50x125 feet, and the wood-working shop, 50x65 feet. The upper story contains a pattern shop, paint, shipping and storerooms and an electrical experiment room. The engine and boiler-rooms and the blacksmith's shop are contained in a separate brick building, 30x48 feet. The number of hands at present employed is fifty, and the company has started on contracts for seven passenger and three freight elevators. Among other contracts may be mentioned one for two passenger elevators, a freight elevator and two sidewalk lifts for the Gerard apartment-house, New York city. The mechanical superintendent of the company is George R. Stevens, and the manager John P. Casey. These gentlemen were for upward of eleven years in the employ of Morse, Williams & Co., of Philadelphia. The officers of the company are George R. Stevens, president; John P. Casey, vice president, and David S. Cann, secretary and treasurer. The company has been incorporated under the laws of the State of Pennsylvania, with a working capital of \$50,000, and its plant, real estate and buildings represent \$35,000 additional. It is expected to do business in all sections of the country, and the concern starts out well equipped.

TRADE LITERATURE.

THE attention of users of woodworking machinery is directed to the new price-list and telegram code just issued by J. A. Fay & Co., of Cincinnati. The various supplies to be obtained from this concern are completely classified, enabling buyers to refer quickly to whatever machine is needed.

THE injectors manufactured by the Rue Manufacturing Co., of Philadelphia, Pa., have been on the market for the past twenty years, and their success has been noted, thousands being now in use. The company has just issued a pamphlet of its injectors, ejectors, steam valves, boiler checks,

boiler washing and testing apparatus, etc. Send for a copy.

THE first price list of the lumber department of the Central Coal & Coke Co., of Texarkana, Texas, has been issued, and a most complete pamphlet it is. Buyers of lumber should send for a copy. The company's large new plant is nearing completion rapidly, and will be in operation by June 1. Mr. J. W. Amerman, of Texarkana, is manager of the lumber department.

AN illustrated catalogue of latest improved looms has just been issued by the Mason Machine Works, of Taunton, Mass. This pamphlet is cloth covered, and with fine illustrations and good printing the company presents to the trade a good representation of its product. The Mason Works was founded in 1842, and is engaged in building cards, spinning frames, mules and looms. Correspondence is invited on all kinds of cotton-weaving machinery. Notes of interest to superintendents and weavers are also given a place in the catalogue.

USERS of saws will find much of interest in Emerson's "Hand-Book of Saws," and should send for a copy of it. It is issued by Emerson, Smith & Co., Limited, of Beaver Falls, Pa., and includes a complete catalogue of their make of saws, which are used by some of the largest saw-mill builders in this country. This firm claims to be the first saw manufacturers in the world to introduce and use natural gas in saw tempering, and since doing so have found that their steel does not oxidize and that all of their saws have a toughness and uniformity of temper they were not able to attain before.

THE Reading Bolt and Nut Works were established in 1865 and grew by frequent additions to cover about four acres of ground, until, with the exception of the rolling-mill building, they were totally destroyed by fire on the night of February 6, 1891. New and larger structures of iron, steel and brick were promptly erected and supplied with the most modern machinery of best design for the production of bolts, nuts, washers, rivets, etc. The company is, therefore, at present in better position than ever for promptly executing orders, and since it manufactures in its own mills all the iron and steel consumed in the works from the best high grade materials that can be obtained, it is able to furnish goods of standard excellence and uniform quality. In the line of machine bolts, lag screws, boiler rivets and railroad-track bolts particularly its facilities are large and unsurpassed. The blacksmith department is supplied with machinery for manufacturing a great variety of iron work for bridges, buildings, cars, agricultural implements, etc. Messrs. J. H. Sternbergh & Son, proprietors of these works, which are located at Reading, Pa., have just issued a new catalogue for 1894, which will be furnished upon application.

THE list of uses to which perforated sheet metal is now put, as given in an interesting catalogue issued by Chas. Mundt & Sons, Nos. 88 and 90 Walker street, New York, includes nearly 150 different things. The variety of styles and sizes and character of perforations as shown by illustrations is an interesting study, as well as the variety of purpose to which this material is adapted. This list, as given by Messrs. Mundt & Sons, takes in a line of industry and general business covering everything along the whole alphabet from ash sifters to wheat sieves. It is, however, in leading manufacturing interests, such as phosphate works, general mining machinery, coal and iron business, cottonseed-oil mills and fertilizer works, where there is the largest consumption of perforated metal. The steady expansion of these industries throughout the South is furnishing an ever-increasing demand for perforated metal, and buyers will be interested in the study of this catalogue. In addition to the various sizes as shown, Messrs. Mundt & Sons make special dies at short notice for any work required. Their plant is fully equipped with new and improved machinery for handling the business, enabling them to guarantee prompt shipments. This catalogue will be furnished upon application to anyone interested in the subject.

A Newport News Land Company.

Some of the leading business men of Newport News have organized the Town Lot Investment Association, which has some unique features. The company has secured 900 lots, ranging in prices from \$200 to as high as \$1500, the aggregate value at present scheduled prices being \$266,500. By this combination all of the 900 lots are put into one company at an average of \$200 each, or \$180,000, showing a saving in this plan of aggregation of \$86,500. It is proposed to sell lots at \$200, charging \$10.00 at the time of subscription and \$10.00 per month until the full price has been paid. When the lots are all sold and the payments made for them there will

be a distribution on some fair, equitable and lawful basis. The growth of Newport News is such as to guarantee its becoming a large city. It is one of the coming ports of the country. The directors of this company include a number of the leading business men of Newport News. Mr. M. B. Crowell, the general agent of the Old Dominion Steamship Co., is the president; Mr. L. P. Stearnes, collector of customs, is vice-president; Mr. George H. Schmeltz, banker, is treasurer, and Mr. Carter M. Braxton, president of the Real Estate, Title & Guarantee Co., is general manager. Full information regarding the growth of Newport News and the plans of this company can be had from Mr. Braxton.

The Fight Against Oleomargarine.

THE MANUFACTURERS' RECORD has recently published several articles regarding the fight that is being waged in some States against the oleomargarine industry. These articles have called forth a large number of letters, especially from those who, because of their interest in cottonseed oil, have had to make a study of the oleomargarine industry, in strong commendation of the facts given in the MANUFACTURERS' RECORD. One writer says: "It seems to me that the very most the butter people could ask is that all articles sold should be sold under their own name. Take a butter made of beef, stearine and cotton-oil, there is not the slightest objection to it as a food product. In fact, butter would be more liable to be impure than such a product as this. If Congress should pass a bill on the subject of impure foods I would regard it as a proper thing, but under such a law there would be quite as much butter and milk condemned as oleomargarine. Indeed, I am sure that more butter and milk would be condemned. Butter and milk are both liable to all sorts of impurities, as the result of diseased cattle or impure food fed to cattle. This is notably the case with cattle fed upon the swill from the cities. Opposed to these possibilities, both in the case of lard and butter, cotton oil, which is an important part of oleomargarine, cannot but be a pure product, except in the case where the seed may be slightly damaged, but in this case the color of the oil would immediately indicate it." Another writer, who has given much study to the subject of butter-making for the last fourteen or fifteen years, says: "You may take the manufacture of natural butter from the cow until the butter pads are printed by the dairy maid or by machines in the creameries and compare it step by step with the manufacture of butter oil and oleomargarine, and you will find for purity and cleanliness the cow is simply 'not in it.'"

THE MANUFACTURERS' RECORD believes that the attempt to restrict the production or consumption of oleomargarine or of artificially-made butter is class legislation of the worst kind. It is admitted by the highest authorities in the United States that these artificial butters are absolutely wholesome; that they are carefully prepared, and in cleanliness and in every other respect are far superior to most of the butter sold in the markets. There is no reason why such a product as this, which has attained such importance and which furnishes a cheap and wholesome food product to so many thousands of people, should be interfered with by legislation.

Progress of a North Carolina Town.

The growth of many Southern towns, even of the smaller ones, during the last few years is a good indication of the steady advance of the whole South despite the general business depression. North Wilkesboro, N. C., is a good illustration of this. The Winston Land & Improvement Co., which started North Wilkesboro, has issued a circular which says:

"North Wilkesboro, which is seventy-five miles of Winston, is the centre of the upper Yadkin valley, surrounded by a rich agricultural, timber and fruit country. Started three years ago with eighteen inhabitants, it now has a population of 600 people, with twenty-four stores, a good bank, a \$13,000 bank building, a \$3000 Presbyterian church a \$3000 Baptist church, a high school with 125 students, a \$4000 school building, twenty-six store buildings that cost over \$20,000, over \$100,000 worth of residences, three sash and blind factories, two wagon shops, harness shop, two foundries, shoe shops, meat market, two \$5000 bridges, ten miles of splendidly graded streets, a good hotel, livery stable, a regular town government with mayor, board of town commissioners and policeman, town, State and county taxes only \$1.25 on the \$100 worth of property. The aggregate amount of business exceeds that of any other town in the county of Wilkes or that of any place in the State west of Winston. Wilkes is the largest county in this section of North Carolina, with a population of nearly 25,000 people. North Wilkesboro gets nearly all of the trade of Wilkes, most of Ashe and Alleghany, part of Alexander, Caldwell, Watauga and Yadkin counties, and, with all these and many other advantages, it would be exceedingly strange if North Wilkesboro did not build up rapidly, as it is now doing." That is a very good showing for a healthy, steady growth of three years.

THE East Laurel (Md.) Improvement Co. has purchased 100 acres of land near Laurel for \$35,000. It is understood that the property will be divided into building lots.

DR. WILLIAM BRANDETH, George Crawford and James Blandford, reported to be rich New Yorkers, are investigating the gold ores of North Carolina.

NAVIGATION on the Tennessee river has been opened to Knoxville, and a steamer is carrying freight between St. Louis, Chattanooga and that city.

READ HOUSE, Chattanooga, Tenn., is one of the most favorably-known hotels in the South; attested by its register record; second to none in the number of names enrolled therein daily. Its situation immediately in front of the union depot, and at the same time in the centre of the business portion of the city, makes it at all times the commandant of the patronage of the tourist as well as commercial man, who have made it headquarters in Chattanooga for years. We bespeak for the Read continued popularity.

Atlantic City.

Numbers of visitors are now being attracted to the Queen City by the Sea to enjoy the pure and invigorating air, the balmy breezes tempered by the Gulf Stream and the multitude of attractions of the popular American watering place—Atlantic City. The board walk, which is a distinctive feature of this resort, now presents daily a panorama of almost an endless procession of humanity. The hotels in the evening convey a most attractive picture of social enjoyment and inviting comfort. The train service of the Pennsylvania Railroad presents the quickest and most comfortable ride to and from this resort. From Baltimore (Union Station) the 12.53 and 4.10 A. M., 12.05 and 1.20 P. M. trains week days, and on Saturdays the 10.45 A. M. train make close connection with trains from Philadelphia (foot of Market street) over the company's double line to Atlantic City. Returning, express trains leave Atlantic City at 7.35 and 9.00 A. M. and 3.55 P. M. week days, 4.00 and 5.30 P. M. Sundays only, closely connecting at Philadelphia with trains for Baltimore. Excursion tickets are now on sale at all the company's principal ticket offices.

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RECEIVER'S SALE

VALUABLE REAL ESTATE NEAR BALTIMORE CITY, QUARRIES, MACHINERY, &c. Property of the Lake Chrome & Mineral Company of Baltimore County.

I will offer at public auction on the premises on Wednesday, May 16th, 1894, at 2 o'clock P. M., seventy acres of land about one half mile from N. C. R. R., and also offer at the same time the Derricks, Hoisting Machinery, Ropes, Quarrying apparatus, Tools, &c. Terms of sale, Real Estate, one-third cash, balance in six and twelve months, or all cash, at purchaser's option. Credit payments to bear interest from date of sale. The personal property will be sold for cash.

JAMES POLLARD, Receiver,
209 St. Paul St., Baltimore, Md.
EDWARD SOPER & CO., Auctioneers.

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO.
BANKERS AND BROKERS,No. 213 E. German Street, [KEYSER BUILDING.] Baltimore, Md.
Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.**HERMANN COHEN & CO.**
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CASH VALUE are the main features of paid-up
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its cash value. Phosphate and timber lands for
sale; a phosphate plant offered at \$30,000.00, pay-
ing \$10,000.00 net profit per annum; 4360 acres at
\$2 3/4% per acre, near Winter Haven, Fla. (this is
the noted tomato region, small tracts selling at
\$20 to \$50 per acre.) If interested write us.
Reference—Dun, Bradstreet or National Bank of
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SURPLUS and undivided Profits, \$600,000Legal Depository for Money.
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NEW YORK.Investment Securities,
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Commercial Paper,
Railway and Industrial Plant
Equipment.Correspondence with Individuals, Cor-
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Lots, Factories, Farms,
Breweries, Hotels, Manufactories, Tim-
ber Land, Railroad
or Industrial
STOCKS or BONDS
and wish to exchange them for other properties,
send particulars to

C. W. DUNN,

114 Nassau Street, NEW YORK.

NOTICE.

NORFOLK AND WESTERN RAILROAD CO.

The Annual Meeting of the shareholders of the
Norfolk and Western Railroad Company will be
held on Wednesday, the second day of May,
1894, at 10 o'clock, A. M., at the office of the
Company, in the city of Roanoke, Virginia,
when an election will be held for thirteen
directors for the ensuing year, and such other
business transacted as may properly come be-
fore the meeting. The transfer books will be
closed from 3 o'clock P. M., April 14, 1894, until
9 o'clock, A. M., May 4th, 1894.

April 14th, 1894. A. J. HEMPHILL, Secty.

A New Topographic Map

OF THE

SOUTH APPALACHIAN REGION.

Compiled from the latest government surveys
by John W. Hays, City Engineer of Petersburg,
Va.; late of the Engineer Corps of the United
States Geological Survey.A large wall map, printed in colors, showing
in detail the topography of the entire mountain
region of the South from the Ohio River to
Chattanooga. Correct elevations given in feet
of towns, peaks and gaps.

Price, Mounted on Cloth, \$5.00.

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JOHN W. HAYS, Petersburg, Va.

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tions. Also Water Powers, Mineral Property,
Mountains Hotel Property, Mountain Estate and
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A city of 35,000 people, has a number of large
manufacturing enterprises and wants more.
Woodworking, agricultural implement and
cotton factories preferred.

For details and inducements address

LITTLE ROCK COMMERCIAL LEAGUE.

WACO, TEXASSituated in the heart of the greatest cotton pro-
ducing State in the Union, is prepared to interest
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portation assured.With twenty-one hot artesian wells and mag-
nificent natatoriums, WACO is destined to be-
come the greatest health resort in the South.

For information address

J. HANSEL WOOD,

Chairman.

PROPOSALS.

CONVICT LABOR TO LEASE.—The man-
agement of the TEXAS STATE PENITEN-
TIARIES desires to correspond with manufac-
turers regarding the lease of convicts. Having
completed recently very large and roomy build-
ings and having steam-power to propel a great
deal of machinery, and having a large force of
men to lease, the management feels that an ex-
ceptional opportunity is offered to manufacturers.
The labor will be leased on reasonable terms.
For full particulars write, giving number of men
wanted and the character of work contemplated,
to L. A. WHATLEY, Superintendent Texas State
Penitentiaries, Huntsville, Texas.

BIDS WANTED.

THE BOARD OF CITY COMMISSIONERS
will receive bids for the period of sixty
days for the furnishing of plans and specifications
and for the furnishing of materials necessary
and for the constructing of a complete system of
water works for the City of Key West, in ac-
cordance with set of plans and specification which
may be adopted by the Board and will pay for
the accepted plans and specifications a sum not
to exceed two thousand dollars (\$2000); all other
plans and specifications which may be furnished
and which are not accepted will not be paid for.
The Board reserves the right to reject any and
all bids and plans and specifications that may
be submitted, and the City of Key West reserves
the right to pay for plans and specifications and
all material and labor required in the construction
of the work, in whole or in part, in 6 per
cent. semi-annual interest bearing Water Works
Bonds of the City of Key West at not less than
par value. Address CITY COMMISSIONERS,
Key West, Fla.**PROPOSALS FOR SUPPLIES FOR THE
POST OFFICE DEPARTMENT AND
POSTAL SERVICE.**

POST OFFICE DEPARTMENT.

WASHINGTON, D. C., April 2d, 1894.
Sealed proposals will be received at this De-
partment until Monday, May 7, 1894, at 2 o'clock
p. m., for furnishing wrapping paper, wrapping
paper for facing slips, twine, letter scales, post-
marking and rating stamps, rubber stamps, can-
celling ink, pads, paper, envelopes, rubber
goods, pens, pen holders, pencils, inks, muci-
lage, glass goods, rulers, folders, articles of
steel, rubber erasers, books, typewriter supplies,
and miscellaneous stationery, in such quantities
of the different articles respectively, and at such
times and from time to time, as they may be
ordered, during the fiscal year beginning July
1, 1894, and ending June 30, 1895, for the use of
any branch of the departmental or postal service.
Blanks for proposals, with specifications giv-
ing detailed statement of the requirements to be
met in respect to each article, and also the esti-
mated quantities probably to be required of
each, and giving full instructions as to the man-
ner of bidding and conditions to be observed by
bidders, will be furnished on application to the
Superintendent of the Division of Post Office
Supplies, Post Office Department, Washing-
ton, D. C.The Postmaster General reserves the right to
reject any or all bids, to waive technical defects,
and to accept any part of any bid and reject the
other part.

WILSON S. BISSELL,

Postmaster General.

DEPARTMENT OF THE INTERIOR. Wash-
ington, D. C., April 14, 1894. Sealed propo-
sals will be received at this Department until 2
o'clock p. m., Monday, May 7, 1894, for furnish-
ing the following classes of supplies, etc., during
the fiscal year ending June 30, 1895, to wit: (1)
for Fuel and Ice; (2) for Furniture, Towels,
Forage, and other Miscellaneous Supplies; (3)
for Stationery; (4) for Envelopes for the Depart-
ment of the Interior, its several bureaus and
offices, and the Civil Service Commission. Also
for such meats, provisions, groceries, dry goods,
shoes, drugs, paints, hardware, fuel, ice, lumber,
etc., as may be required by the Government
Hospital for the Insane near Washington, D. C.,
during same period. At the same time and place
proposals will also be received for the Washing-
ton of Towels for the Department, its bureaus, and
the Civil Service Commission for the year ending
June 30, 1895, as well as for the purchase during
that period of the Waste Paper of the Department
of the Interior. Bids must be made on Govern-
ment blanks. All bids (except those for purchase
of waste paper) accepted and contracts awarded
subject to an appropriation by Congress to meet
the expense. Forms of proposals, schedules of
items, specifications and instructions will be
furnished to bidders on application to the Chief
Clerk of the Department; but requests for blanks
should specifically designate the class or classes
of supplies upon which it is proposed to bid.
All proposals will be opened at the time and
place above stated, and bidders are invited to be
present at such opening. HOKE SMITH,
Secretary.**DEPARTMENT OF THE INTERIOR, GEN-
eral Land Office.** Washington, D. C., April
14, 1894. Sealed proposals will be received at
this office until 2 o'clock p. m., Monday, May 7,
1894, for photolithographing and printing 15,000
copies, more or less, of the maps of the United
States, and 20,000 copies, more or less, of the
maps of the land States and Territories prepared
in the General Land Office. Specifications as to
the character of the work, size of maps, quality
of paper may be procured at this office, where
specimens will be exhibited to bidders, who must
satisfy themselves as to all requirements. At the
same time and place proposals will also be
opened for photolithographing and printing such
copies of township plats and other official plats
constituting part of the official records of the
office as shall be required during the fiscal yearending June 30, 1895. Details and samples of the
work to be done will be exhibited to bidders on
application. All bids accepted and contracts
awarded subject to an appropriation by Congress
to meet the expense. Bonds with approved
sureties for faithful performance of the work
will be required. The right is reserved to reject
any and all bids. Proposals must be made in
duplicate and addressed to the Commissioner of
the General Land Office, indorsed on the envel-
ope "Proposals for United States Maps," or "Pro-
posals for reproducing Township Plats," as the
case may be. All proposals will be opened at the
time and place above stated, and bidders are
invited to be present at such opening.

S. W. LAMOREUX, Commissioner.

DEPARTMENT OF THE INTERIOR,
United States Patent Office, Washington,
D. C., April 14, 1894. Sealed proposals will be
received at the Office of the Commissioner of
Patents, until 2 o'clock p. m., Monday, May 7,
1894, for photolithographing or otherwise pro-
ducing plates for the Official Gazette, for photo-
lithographing or otherwise producing copies of
drawings of the weekly issue of patents, for pro-
ducing copies of designs, trade marks, and pend-
ing applications, for the reproduction of ex-
hausted copies of drawings and specifications
for the fiscal year ending June 30, 1895, and for
the republication of 1930 pages, more or less, of
the Official Gazette containing the patents which
will expire between July 1, 1894, and June 30,
1895. All of said work to be done under the
supervision of the Commissioner of Patents, and
in the City of Washington, if it can there be done
at reasonable rates. Specifications and speci-
mens will be furnished upon application. All
bids accepted and contracts awarded will be
subject to the appropriation to be made by Con-
gress to meet the expense. Bonds with approved
sureties for the faithful performance and execu-
tion of all work called for by contract will be
required. The Commissioner reserves the right
to reject any and all the bids received. The pro-
cess to be used in the performance of the work
must be stated, and all proposals must be sub-
mitted in duplicate, addressed to the Commis-
sioner of Patents, indorsed on the envelope "Pro-
posals for photolithographic work, Patent Office."
The proposals will be opened at the time and
place above stated, and bidders are invited to be
present at such opening.

JOHN S. SEYMOUR, Commissioner.

**PROPOSALS FOR INDIAN SUPPLIES AND
TRANSPORTATION.**—Department of the
Interior, Office of Indian Affairs, Washington,
D. C., April 10, 1894. Sealed proposals, indorsed
"Proposals for Beef (bids for beef must be sub-
mitted in separate envelopes), Flour, or Trans-
portation, etc.," as the case may be, and directed
to the Commissioner of Indian Affairs, Nos. 130
and 132 West Washington Street, Chicago, Ill.,
will be received until 1 o'clock p. m. of Tuesday,
May 15, 1894, for furnishing for the Indian Service
Beef, Flour, Bacon, and other articles of subsis-
tence; also for agricultural implements, wagons,
harness, hardware, medical supplies, and a long
list of miscellaneous articles; also bids for the
transportation of such of the articles, goods, and
supplies as may not be contracted for to be
delivered at the agencies. Sealed proposals, in-
dorsed "Proposals for Coffee, Sugar, Clothing,
or School Books, etc.," as the case may be, and
directed to the Commissioner of Indian Affairs,
Nos. 77 and 79 Wooster St., New York City, will
be received until 1 o'clock p. m., of Thursday,
May 31, 1894, for furnishing for the Indian Ser-
vice, coffee, sugar, tea, rice, beans, baking pow-
der, soap, groceries, blankets, woolen and cotton
goods, clothing, notions, hats and caps, boots
and shoes, crockery, and school books. Bids
must be made out on Government blanks. Sched-
ules giving all necessary information for bidders
will be furnished upon application to the Indian
Office in Washington, Nos. 77 and 79 Wooster
Street, New York City, or Nos. 130 and 132 West
Washington Street, Chicago, Ill.; the Commis-
saries of Subsistence, U. S. A., at Cheyenne,
Leavenworth, Omaha, St. Louis, St. Paul, and
San Francisco; the postmasters at Sioux City,
Yankton, Arkansas City, Caldwell, Topeka,
Wichita, and Tucson. These proposals are
invited under the proviso that appropriation
shall be made for the supplies by Congress.
Bids will be opened at the hour and days above
stated and bidders are invited to be present at
the opening. Certified checks—all bids must
be accompanied by certified checks or drafts
upon some United States Depository, the Nation-
al Park Bank of New York, the First National
Bank of Lander, Wyo., or the First National
Bank of San Francisco, Cal., for at least five per
cent. of the amount of the proposal. D. M.
BROWNING, Commissioner.**THE BOOMER & BOSCHERT**

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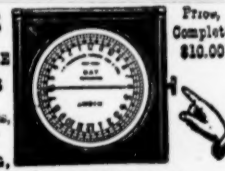
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SECTIONAL PIPE
COVERINGS.**

NON-CONDUCTING COVERINGS FOR STEAM AND HOT WATER PIPES, BOILERS ETC.

READILY ATTACHED OR REMOVED BY ANY ONE. ASBESTOS BOILER COVERINGS

WE ARE PREPARED TO TAKE CONTRACTS FOR APPLYING STEAM PIPE AND BOILER COVERINGS IN ANY PART OF THE UNITED STATES.

H. W. JOHNS ASBESTOS MILLBOARD, SHEATHINGS, BUILDING FELTS, FIRE PROOF PAINTS, LIQUID PAINTS, ASBESTOS ROOFING ETC.

H. W. JOHNS MANUFACTURING COMPANY,

87 MAIDEN LANE, N. Y. JERSEY CITY, CHICAGO, PHILADELPHIA, BOSTON, LONDON

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WALNUT LOGS WANTED

Write, giving quantity and description of logs, freight rate to Baltimore and lowest cash price.

RELIANCE LUMBER & MFG. CO.
210 E. Lexington Street, Baltimore, Md.

WANTED. A SYNDICATE

TO LOCATE TOWNS

along the line of the Stuttgart & Arkansas River Railroad on Grand Prairie. One hundred per cent. per annum can be made. Great inducements given fruit-growers. For particulars address T. H. LESLIE, Vice-President S. & A. R. Co., Gillett, Ark.

Wanted to Sell or Lease

A SASH, DOOR & BLIND FACTORY

60x70 feet; two stories and basement, with storage house 40x80 feet, and dry kiln. Thirty-five new and improved machines for the manufacture of all kinds of wood work used in a building. Seventy horse-power and all necessary belting, etc., attached; ready to start up in a day's notice. Fuel and labor cheap. Situated in a timbered country. Address

R. A. BEVERLEY, Winchester, Va.

Paint and Varnish Factory FOR SALE.

A controlling interest in a Western business established ten years. Good railroad and general trade. Entirely out of debt and making money. Terms cash. An exceptional opportunity this spring for a practical man of moderate means. Principals only. Address

WALLACH & BEACH,
33 Wall Street, New York.

FOR SALE.

Wishing to retire from business, I offer for sale the Stock and good will of an established

FURNITURE AND UNDERTAKING BUSINESS

of forty years standing. It is situated in one of the finest interior cities of South Carolina and offers a rare opportunity for a good business man. Address "D," care of Manufacturers' Record.

FOR SALE.

Asparagus Farm Land 300 ACRES.

Situated thirty minutes from the city of Charleston, on bold navigable waters; landings on tract for over half mile; about one mile distant from the celebrated French Asparagus Farm, largest in United States, and adjoining asparagus farm of Mr. Nix, of New York, and Mr. Boyd, of Charleston. Address

A. F. C. CRAMER,
CHARLESTON, S. C., U. S. A.

A Valuable Property FOR in Virginia, SALE.

containing large deposits of fine qualities of Gray, Black and Pink Marbles, Blue and Brown Building Stones, Ochre, Lithographic Stone, Brick Clay and indications of Manganese.

The marbles can be cut, dressed and delivered on the market for about \$1 per cubic foot, and are worth \$3; the building stones for about 50 cents, and are worth from \$1 to \$1.25; the lithographic stone will compare favorably with the imported, and can be had in any size desired at about one-third of the cost of imported; the other articles can be handled at a good profit.

The property is on the Norfolk & Western Railroad and within a mile of the Chesapeake & Ohio Railroad, convenient for shipping North, South, East and West. Within 100 miles of Washington D. C. A river running through the property will furnish ample power to operate it.

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Care Manufacturers' Record.

FOR SALE.
\$25,000 Stocks (one-half interest of the Texas Fire Brick and Tile Company, located at Athens, Texas. The company has a growing business, large quantities of very fine clays, cheap fuel and well situated. Address

B. N. BRYANT,
ATHENS, TEXAS.

\$50 BEST LAND INVESTMENT IN THE SOUTH TO-DAY. Three Hundred Thousand Acres on Florida Lower East Coast, just opened for purchase at \$1 per acre and upwards in large areas. Near railroad. Suitable for Pineapples, Rice, Vegetables, Sugar, Sisal Hemp, etc. Much of it well timbered with pine. Address BOX 176, Jacksonville, Fla.

VALUABLE Coal and Iron Property

FOR SALE.

This property, belonging to the Ten Mile Coal and Coke Co., consists of 12,000 acres of coal lands in Harrison Co., West Virginia. The property lies on the Monongahela R. R., and is admirably located, being only nine miles from Clarksburg.

For further particulars address
T. M. JACKSON, President,
or **J. HORNOR DAVIS, Secretary,**
Clarksburg, W. Va.

2000 SPINDLE Cotton Mill

FOR SALE.

By virtue of the power and authority given by a certain mortgage, executed by J. F. Moore and W. A. Moore to the Bank of Fayetteville, which is recorded in the office of the Register of Deeds of Surry County, N. C., we will sell on the premises at 12 o'clock M., on The 1st Day of May, 1894, this valuable property, situated on Lovell's Creek, near Mt. Airy, N. C., and containing the following:

2000 SPINDLES, 30 LOOMS, DRAWING FRAMES, FEEDERS, CARDS, etc.
Said Mill is well equipped and in good running order, all the machinery comparatively new and propelled by water power. Also One Hundred and Twelve Acres of Land on which said Mills are located, together with a GOOD FLOUR AND CORN MILL, NINE TENEMENT HOUSES, STORE HOUSE and other buildings.

This is the most desirable property that has ever been offered for sale in this section of the State. The products of the Mill have always found ready sale to home purchasers.

Terms of Sale: One-quarter cash; balance in six, twelve and eighteen months. Interest at 6 per cent. per annum from sale on deferred payments. Title reserved until entire purchase money is paid.

For further particulars address

W. A. MOORE, Mt. Airy, N. C.
Bank of Fayetteville, Mortgagee,
Fayetteville, N. C.

C. W. BROADFOOT, Attorney,
Fayetteville, N. C.

W. F. CARTER, Attorney, Mt. Airy, N. C.

N. B.—Also, at the same time and place, one of the best equipped Woolen Mills in the State and several valuable Town Lots will be offered for sale.

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OWNER OF A FACTORY (used for manufacturing paints, but adapted for any business) will sell entire, on favorable terms, rent low, or take \$5000 of paid-up stock of any reliable company entering the premises. A splendid plant. Fine location. Cheap labor. Good facilities. Address EXCEL, Manufacturers' Record.

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A large Industrial, Railway, Mining and City Property, now paying 8 per cent. on price, \$800,000, and rapidly and constantly increasing in value, is sure to yield millions in profits under conservative management. Address

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A Small Factory FOR SALE OR RENT.
Fitted up for the Manufacture of interior Woodwork, etc.

All ready to run. In a good location. Present buildings can be rented if so desired. Stock of hardwoods, varnish, etc., will be sold also. Apply to or address **W. T. COTTER, Jacksonville, Fla.**

FOR SALE.

Saw Mill, Planing Mill and Box Factory,

WESTERN ARKANSAS, in city of 4000. Only mill and lumber yard. Have good trade, which can be increased. Handle everything in builders line. Reasons for selling—have other business. Address BOX FACTORY, care Manufacturers' Record.

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Cotton Factories

at the South is called to HENDERSON, N. C., situated in the midst of a cotton country, on the Seaboard Air Line about 25 miles from Norfolk, Va. A large FACTORY is for sale for rent, and inducements will be offered to manufacturers locating here. For further information apply to

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Some Money in a first class MORTGAGE

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with a vein 8½ feet thick and easily worked. Situated on line of Norfolk & Western Railroad. TITLE PERFECT. Our coal is the VERY BEST FOR STEAM AND COOKING. Is sold in New York for gas and along railroad for domestic purposes. Business is on a paying basis and we are in a position to meet interest promptly. Will be glad to furnish statements of analysis. We invite correspondence.

COAL MINE,

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A BICYCLE FOR \$15.00,

In Good Running Order, is one of our bargains in Second-Hand High-Grade Wheels. One hundred machines \$15 to \$100. Send for descriptive price list.

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60 in. Radial Drill, nearly new.
19 in. x 8 ft. Bed Lodge & Davis Lathe, nearly new.
21 in. x 10 ft. " " " " " "
No. 4 Universal Milling Machine, " " "
20 Shaper, Lodge & Davis, " " "
MacKinnon Key Seating Machine, " " "
30 Horse-power Chandler & Taylor self-contained Engine, with 35 horse-power Boiler and Duplex Steam Heater, etc., complete, all in good condition.

I will sell any of the above dirt cheap on reasonable terms. Address

W. D. McNaull, Roncerverte, W. Va.

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E. BROWN, General Ticket Agent.

RICHMOND AND YORK RIVER LINE.

On and after MONDAY, February 20, 1892, the
steamers of this line leave Baltimore daily (Sun-
day excepted) at 4 P. M. for West Point, Rich-
mond and the South, arriving at Richmond at
10.30 A. M., connecting with trains of the Rich-
mond & Danville System. Steamer leaving
Mondays, Wednesdays and Fridays calling at
Gloucester Point and Allmond's Wharf; steamer
leaving Tuesdays, Thursdays and Saturdays
calling at Yorktown and Clay Bank. Through
tickets and bills of lading issued to all points of
the Richmond & Danville System. Way freight
must be prepaid. Fare to Richmond, first class,
\$2.00, second class, \$1.50. Tickets sold and bag-
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FARE—First-Class, \$10.00 Round Trip, \$20.00.
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FRIDAY at 3 P. M. Fare—First class, \$15.00;
round trip, \$25.00; second class \$10.00.
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(With option of calling at Norfolk.)

LIVERPOOL.
S. S. RAPPAHANNOCK.....April 28.
S. S. SHENANDOAH.....May 14.
S. S. KANAWHA.....To follow.
LONDON.
S. S. APPOMATTOX.....April 17
S. S. CHICKAHOMINY.....April 30
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Steamers leave daily (except Sunday) Union
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Portsmouth 8.15 A. M. AT OLD POINT COM-
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